# GUELPH Equine Guelph



Annual Report May 1, 2024 – April 30, 2025

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#### **Executive Summary**

In July 2003, a small centre called Equine Guelph, the Centre for the horse owner at the University of Guelph, officially opened its doors. Over the last 20+ years, Equine Guelph has never wavered from its industry-derived strong mandate – supporting health, welfare and safety for the horse. Through the Research, Education and Communications programs, there is significant progress and growth in each of these areas in 2024-2025 in service to the industry in Canada and beyond! This annual report provides details on the 2024-2025 activities of Equine Guelph and recognizes the partnerships that make these achievements possible for the benefit of the equine industry.

Research funding was received from Horseman's Benevolent and Protective Association (\$65,000), Horse Improvement Program/Quarter Racing (\$125,000), E.P. Taylor (\$103,231), donations (\$2564) and our new funding source, the Donna Moore Estate for Research (\$68,265) for a total of \$301,573, slightly up from the previous year. Seven new projects were accepted for funding on priority-designated topics for projects. There are 29 continuing projects from last year. These projects cover a wide variety of research areas. For many years, we continue to receive more proposals than can be funded with current budgets. This demonstrates the need for higher investments into research that are recognized priorities of the industry. The results of the research program contribute to development of specialist knowledge at Ontario Veterinary College, for veterinarians in practice and current students who will become our future vets.

The expanding Communications Program plays a vital role in sharing research findings with the broader equine community. Through researcher interviews, fact sheets, and practical tools for horse owners, this information is distributed to our industry partners—and beyond—via a wide range of media outlets and social media channels across Canada and internationally.

Growth of the Equine Guelph education program continued in 2024-25 with new programming on TheHorsePortal.ca. A very positive development was the renewal of government funding for a third year of the Ontario Equine Education and Employment Program (OEEEP) to provide pathways into the industry. In partnership with VPI Employment Services and Ontario Harness Horse Association, this allowed us to continue offering this important course to help newcomers find pathways into our industry, thanks to the Provincial Government and the Skilled Trades program. Now, in our third year, Equine Guelph continues to enhance the online learning environment each year. With 4 cohorts opening, this program continues to fill a void in our horse industry. Reaching out to individuals who are interested in entering the industry, providing basic knowledge of horses and their care, assistance with resume/interviewing skills, we are connecting with industry mentors willing to take on those newcomers so they can create pathways in the industry and future careers.

TheHorsePortal.ca continues to expand and bring new students to our learning community. These courses are reviewed annually and updated with current research

findings and their application of that information to support horse welfare. TheHorsePortal.ca offered 19 courses this year, with a variety of on-demand and instructor-led offerings. Our *Body Condition Scoring* on-demand course achieved our highest enrollment and continues to provide important information to horse owners to help them more accurately assess BCS and make informed, evidence-based decisions for supportive care. A total of 138 youth participated in the *Careers in the Horse World* course, which was offered free of charge to encourage new students to explore opportunities in the equine industry. The *Horse Behaviour and Safety* course also saw strong engagement, with 217 enrollments. Among the highest-enrolled offerings were the combined *Behaviour and Safety* and *Sickness Prevention* courses, which attracted 287 students. Additionally, both of our racing-exclusive courses each saw enrollments exceeding 90 students.

Our 12-week programs, through our partnership with the School of Continuing Studies (formerly OpenEd) have been under review to streamline and update the courses and pathways to Certificates and the Diploma through our report to the Senate. Course enrollment overall for our 12-week courses is slightly lower from previous years but is still a strong program for Equine Guelph. New approaches for marketing are under review for future semesters. In keeping with previous years, there were 19 course offerings for the Certificate and Diploma program.

For the youth of our industry, Equine Guelph continues to build new programming to add to our award-winning program, EquiMania!, both online and as a travelling equine display promoting health, welfare and safety of horses and their caretakers.

New offerings of Large Animal Emergency Rescue Training continue, thanks to supportive funding from Grand River Agricultural Society. Training also continues for the Animal Welfare Service investigators with sessions for two cohorts offered over the year (5-days of online sessions followed by 3-days of intensive hands-on training sessions. Training continues into 2025.

Development of complementary training in the area of equine welfare continues with a new program being developed by Dr. Shane Bateman and Gayle Ecker for *Equine Veterinary Forensics* - to be offered in 2025 - with live webinars/course work/resources on TheHorsePortal.ca. This will be followed by a mock investigation day at OVC consisting of evidence procedures, collection and documentation and other priority areas in this field. This program was made possible by a grant from the Campbell Centre for the Study of Animal Welfare.

Two very special recognitions were received this year with a special night to honour Gayle Ecker, Director and the Equine Guelph team by horse industry partners for 20 years of dedication to the industry. Ecker was also honoured with the King Charles Coronation Medal in recognition of her unwavering dedication to equine welfare, her support of the horse industry, and her pivotal role in earning international recognition for Equine Guelph.

For over 20 years, the Equine Guelph Council membership, composed of provincial and national equine organizations – both racing and non-racing sectors – has provided a two-way communication channel between the industry to the University of Guelph. This

allows and encourages conversations about priority research areas and effective use of research funds, communications to the industry and different levels and approaches for education offered to participants in the equine industry. With three meetings per year, the industry has an opportunity for ongoing input and priorities.

The researchers of U of G, and the staff of Equine Guelph acknowledge and sincerely appreciate the support and financial input from the funding groups and donors. Annual funding has been received from the E.P. Taylor Fund, HIP/TIP funds, Ontario Racing and the Horsemen's Benevolent and Protective Association of Ontario (HBPA), along with important support from our donors. Further information for the research programs, including publications and national/international speaking engagements, are detailed in the Appendices. We would like to draw your attention to the level of equine research achieved and the publications, conference presentations and contributions to the communications and education programs because of this important partnership.

Equine Guelph would like to express their appreciation to Council partners for their support, input and financial contributions - Equestrian Canada, the Horsemen's Benevolent and Protective Association of Ontario, Ontario Equestrian, the Ontario Harness Horse Association, Standardbred Canada, the Quarter Racing Owners of Ontario Inc., Ontario Association of Equine Practitioners, the University of Guelph and Ontario Racing (which includes Canadian Thoroughbred Horse Society, Central Ontario Standardbred Association and Standardbred Breeders of Ontario Association).



Dear Partners and Supporters,

As Equine Guelph marks its 21st year since being formally recognized as the Centre for the Horse Industry at the University of Guelph in July 2003, we continue to grow and evolve in response to industry priorities. Our commitment to advancing equine health, welfare, and safety remains at the heart of everything we do

This year, we launched a redesigned website with a fresh look and improved functionality—an important step in enhancing access to our programs and resources. Guided by feedback from our Council Committees, students, and industry stakeholders, Equine Guelph actively identifies service gaps and responds with targeted programming. Our Research Committee, composed of funding partners, meets annually to review emerging priorities and allocate funding to new and ongoing projects. Similarly, input on our Education and Communications programs helps us adapt and innovate to meet the evolving needs of the equine community.

New initiatives developed from this feedback include:

- A training course in Equine Veterinary Forensics
- A short course on Equine Conditioning for the racing sector
- Updates to Equine Welfare Assessment Training
- New youth modules for EquiMania! Online on TheHorsePortal.ca
- A significantly enhanced Biosecurity Calculator, developed in partnership with the Equine Disease Communication Center and the American Association of Equine Practitioners

Industry investment in equine research remains a cornerstone of our work. It not only addresses critical questions but also supports the training of OVC specialists, students, and practicing veterinarians. Equine Guelph's funding has also helped launch exploratory research, attracting additional in-kind support and expanding the impact of Ontario's investment—contributing to the industry's Social License to Operate. Thanks to the continued commitment of our partners, Equine Guelph funded seven new research projects this year.

As Co-Chairs, we extend our heartfelt thanks for over 20 years of support. We celebrate both our long-standing and new partners whose annual investments enable Equine Guelph to grow and deliver programs that serve the equine industry in Ontario and beyond.

Yours sincerely,

Dr. Jeffrey Wichtel

Dean, Ontario Veterinary College

Mr. Al Patterson

Co-Chair, Equine Guelph

#### Introduction

"The Centre for the horse owner at the University of Guelph" -- Equine Guelph, founded in 2003, was developed to create a unique partnership with the University of Guelph. The goal was to develop a centre of focus – a two-way "portal" between the U of G and the horse industry – and to research programs to focus on industry priorities along with education/training, and communications programs for industry participants. Our mandate to support the health, welfare and safety of our horses and the people working in our industry continues and grows with each passing year with new and improved programming.

Equine Guelph, working with our partners who have membership on the Advisory Council and Research Committee, provides the opportunity for the industry representatives to contribute to the future priorities and focus for Equine Guelph program development since our creation in 2003 and continuing today to play a growing role in development of programs to address the research and education needs of the industry. This report provides information on the development of these programs and demonstrates the ongoing value of the Equine Guelph-Industry partnership for Ontario and throughout Canada.

The Advisory Council of Equine Guelph currently represents Equestrian Canada, The Horsemen's Benevolent and Protective Association of Ontario, Ontario Equestrian, Ontario Racing, Ontario Harness Horse Association, Standardbred Canada, Quarter Racing Owners of Ontario Inc., Central Ontario Standardbred Association, Canadian Thoroughbred Horse Society, Standardbred Breeders of Ontario Association along with members from the University of Guelph. This formula for representation creates the two-way conversation between industry leaders and the U of G. Annual revenue from the E.P. Taylor Equine Research Fund, created by the racing industry and now overseen by the U of G, continues to provide annual support for the research program.

The Dean of OVC, Dr. Jeff Wichtel, (representing U of G), and Mr. Al Patterson (representing industry), continued their leadership roles as Co-Chairs of the Advisory Council to ensure that the programs of Equine Guelph continue to be in service to the industry through regular meetings and input from our industry members on the Council, as they oversee the programs for industry research, education, and communications programs.

This Annual Report for the 2024-2025 fiscal year highlights progress, achievements and challenges of Equine Guelph and its programs in service to the equine industry throughout the province and across Canada.

### **Programs of Equine Guelph**

#### Research

The research program overseen by Equine Guelph and the Research Committee (composed of appointed industry representatives) is an industry-supported program to address identified industry priorities for health and welfare. And important aspect of this program at Guelph is that this funding can help provide a start for new researchers and small pilot programs that show promise for identifying important areas of research. Through an annual call for proposals to U of G equine researchers, this leads to the detailed assessment of the quality of the proposal and its merit relative to identified industry priorities and external review for scientific merit and scored.

Research findings are reported back to the funding bodies and the researchers are available to present their research to these industry boards to help extend this knowledge to their membership. This cycle for funding helps ensure that the industry is part of the decision-making process for allocation of funding and that researchers are reporting back to the funding organizations. There is further distribution of the findings along with the practical application of the knowledge to horse owners and caretakers through the extensive communications program of Equine Guelph and the various educational programs on offer.

We continue to receive proposals for funding that are deemed fundable for their merit and application for the industry by the Research Committee. Unfortunately, these worthwhile projects remain unfunded due to funding limitations.

Research funding allocated was \$301,573 for research projects for 2024-2025. Seven new projects were accepted for funding on priority-designated topics for projects including colitis, fluid therapy, osteoarthritis, and equine welfare education. There are also 29 continuing projects that have received their funding in full and whose researchers will be updating the Research Committee with their progress in Fall 2025.

Detailed information on those studies is found in the Research Projects for 2024-25 in the Appendices including the lay summaries and their application to the industry priorities.

The ongoing support of the Equine Guelph Research program is made possible by our industry partners who sit on the Advisory Council, providing two-way communication. Equine Guelph sincerely thanks the Council partners for their dedication to continue the annual funding. Special thanks also go to the Research Committee appointees who dedicate hours of their time for extensive review of the projects as volunteers while sharing their expertise to ensure that only high-quality projects are selected for effective use of funding on the designated and current priority areas. It is important to highlight that the initial funding received through Equine Guelph allocations have been used many times to leverage further funding from larger agencies and provides even higher value of return to our industry groups because of this annual investment into research.

To continue building value for this program, Equine Guelph further distributes the information to the industry through their own communications and education programs to

industry participants at all levels in both the racing and non-racing sectors through news releases, information sheets, researcher interviews and more. This provides value added for the funding program through a cycle of knowledge development and distribution, along with feedback from the industry for the next cycle to start and a higher return on the industry investment. Industry groups are encouraged to further distribute this information to their members and followers to widely disseminate up-to-date information in support of horse health and welfare.

Research funding provided by the following groups is greatly appreciated - HBPA, the E.P. Taylor Research Fund, Ontario Racing (Horse Improvement Fund), the Estate of Donna Moore, as well as from donations from dedicated individuals who want to be supportive of ongoing research.

Dr. Thomas Koch continues in his role as Co-chair of the Research Committee. Equine Guelph encourages our Council partners to organize research presentations for their members and to distribute research updates and information sheets that arise from the research with the practical application of the knowledge to support health and welfare.

### **Education and Training**

The global focus and concern for equine welfare continues to grow and Social License to Operate continues to be challenged. The Equine Guelph Education and Training programs support the horse industry through innovative training programs and ongoing educational offerings from youth to adult, and from beginner to professional. With fewer opportunities for youth to be involved in horses while growing up, and less opportunities for many to be a participant in the industry as adults, the programs of Equine Guelph become more important every year. With the foundation developed on evidence-based/welfare-based information, Equine Guelph's programs provide many opportunities and pathways for people to enter the industry and to grow as knowledgeable professionals. It also opens the door for informed discussion on traditional vs. new science-based approaches to horse care and handling — an important aspect to contributing in a positive way to the discussions on Social License to Operate along with a focus on environmental concerns and a One Health approach for the industry.

Education was quickly identified as a priority in the initial meetings to form the programs for Equine Guelph. This role continues to be a priority today for education and training where new research findings from U of G and other researcher groups are inserted into every applicable course through regular updating.

In May 2002, Management of the Equine Environment, the very first course online for continuing education at the U of G, was launched, making Equine Guelph a pioneer in equine online education and began the journey of developing practical courses that were more easily accessible for horse owners with busy schedules but an interest in ongoing learning and updating of their knowledge. Equine Guelph continues to offer 19 courses leading to Certificates in Equine Science, Welfare and Business, and/or a Diploma in Equine Studies. Along with this, there is a growing list of short courses on The Horse

Portal covering a broad range of important topics. Further development is ongoing for new programs for youth as part of EquiMania!.

The Horse Portal continues to develop new short courses (currently 19 public courses on offer) with support from our racing partners and donors. Under development are the Conditioning Horses course and new EquiMania! Courses. The Equine Code of Practice course will be undergoing updates in response to the release of the new Code and will reflect best practices for care and welfare. The newly developed Biosecurity Calculator is being incorporated into several of our courses as well to provide up-to-date information.

There were 704 students enrolled in our courses in 2024-2025, from over 20 different countries and the program attracted over 178 new students for our Certificate and Diploma courses.

"Equine Studies delivers exceptional programming focused on equine health, management, and welfare through an evidence-based approach. While students often describe the program as challenging, they equally emphasize how fulfilling and rewarding their experience has been. Instructors in the Equine Studies program are experts in their field and renowned for their extensive knowledge, dedication, and passion for equine health and management." Quote from Jill Ferguson, Manager, Program Development, School of Continuing Studies | University of Guelph

#### EquiMania!

EquiMania! had another exciting and successful year, with a busy schedule of in-person events. The educational displays and activities develop an interactive way to focus learning opportunities for youth on horse health, welfare, safety, and careers in the horse industry. There were many interested attendees, and positive feedback from both visitors and event organizers.



Attendees at Grand River Raceway's Industry Day learn about dental health in horses at the EquiMania! display. Photo by: Monica Laane-Fralick.

Key events attended from May 2024 – April 2025 included:

- Guelph Eramosa Fire Department's Open House: May 11, 2024
- HorseCapades at Toronto's CNE grounds: August 4 15, 2024
- Industry Day at Grand River Raceway: August 5, 2024
- Minnesota State Fair: August 22 September 2, 2024
- Fergus Fall Fair: September 14-15, 2024
- AgScape Career Competition: Nov 20 21, 2024



Participants in AgScape's thinkAG Career Competition learned about careers in the horse industry and the horse's digestive system at the EquiMania! booth. Photo by: Farm Boy Productions

These events provided opportunities for hands-on learning and fostered meaningful conversations about responsible animal care and careers in the equine industry. They also helped maintain visibility for EquiMania! among both general audiences and those with specific interests in agriculture and animal welfare. The program continues to evolve in response to the interests and needs of its audiences, ensuring that learning remains fun, accessible, and impactful.

As of early 2025, planning is underway for the upcoming year, with a focus on community engagement through various avenues, including in-person events and online initiatives.



EquiMania! team members gear up for another exciting day at HorseCapades in Toronto. Photo by: Monica Laane-Fralick

The education program is funded through tuition fees, workshops, and corporate sponsorships. This is invested into the development of new initiatives, the enhancement of ongoing programs, and the delivery of online education, virtual presentations, and webinars.

#### The Horse Portal short courses

Equine Guelph continues developing this program and now offers 19 public online short courses! By combining courses from the one or two-week courses, students can now receive micro-credentials for developing their career pathways and practical, evidence-based knowledge for the horse industry. Many partnerships have been developed with the provincial equestrian associations in Canada, racing partners and U.S. partners, which help us continue to develop more courses, along with our course sponsors. The sponsors who help us develop our courses and extend special offerings for their members are greatly appreciated and are an important part of our educational development with over 1,300 students registered.

A new on-demand course was added to the growing roster this year, Careers in the Horse World for youth. This course was created with funding assistance and partnership with Ontario Racing and was made available for free to young students from December to March. More on-demand courses are in development for the upcoming fiscal year, to provide more opportunities for our students to learn at their desired pace and schedule,

and to ensure that critical information regarding equine welfare – such as the National Codes and Standards – is always available.

The Ontario Equine Education and Employment Program (OEEEP), a partnership with the Ontario Harness Horse Association (OHHA) and VPI Employment Services, received continued funding for 2025 and five new cohorts of students. Funded by the Ontario government, this program of training and work placement helps address the critical and ongoing need for new employees, providing pathways into the equine industry – a considerable challenge as pointed out by many of our students who want to find careers in the industry.

OEEEP students first complete a 6-week online course on TheHorsePortal.ca, in which they learn important areas of health, welfare and safety of horse and person, including learning about the horse industry in Ontario. This is followed by a work experience program with mentors from the industry overseen by OHHA and using Equine JobTrack (supported by Grand River Agricultural Society) to find employers.

Equine Guelph greatly appreciates the ongoing support and the opportunity to continue to develop this important program for the industry. It would not be possible to build this program without our partners, Council members and our sponsors and donors. The Horse Portal has developed into a solid platform that now offers specialized and customized training programs for the equine industry.

Horse Portal Partners currently include:

#### **Provincial Horse Federations**

- Alberta Equestrian Federation
- Equine Association of Yukon
- Horse Council of BC
- Island Horse Council
- Manitoba Horse Council
- New Brunswick Equestrian Association
- Newfoundland and Labrador Equestrian Association
- Equestrian Nova Scotia
- Ontario Equestrian
- Saskatchewan Horse Federation

#### Racing Organizations

- Ontario Racing
- Horse Racing Alberta
- PEI Harness Racing Association
- Central Ontario Standardbred Association
- Standardbred Canada
- Ontario Harness Horse Association

#### **Youth Partners**

4-H Ontario

#### **Animal Welfare Organizations**

 Campbell Centre for the Study of Animal Welfare

#### **Accreditation Partners**

Equestrian Canada

 the Canadian Therapeutic Riding Association

- UK college of Agriculture and many community organizations)
- Equine Connection

#### **International Partners**

 Saddle Up Safely (a program of the University of Kentucky Health Care,

More information is provided in the Appendices.

#### **Education Tuition Awards Provide Important Opportunities**

The Roger L'Heureux Memorial Award commemorates a dedicated racing enthusiast and provides an opportunity for a Standardbred driver, trainer or groom or University of Guelph student to continue with their educational studies.

Emily McNulty, a third-year student in the University of Guelph Equine Management program, has been awarded the prestigious 2024 Roger L'Heureux Memorial Equine Award.

Equine Guelph sincerely thanks the L'Heureux family for their generosity providing these special educational awards and for their foresight in supporting the efforts of students for their career aspirations in the racing industry.

#### Large Animal Rescue Training Program

The Large Animal Rescue Program was developed for the equine industry and beyond for first responders, veterinary staff, and horse/facility owners in response to the need for this specialized training. This program helps with emergency preparedness and response training when there is a need to respond to rescuing horses and other animals in emergency situations – a high-risk activity that requires the specialised training offered by Equine Guelph. The following report reviews the training that has been completed in 2024-2025.

#### **Hands-on training:**

## <u>British Animal Rescue & Trauma Care Association (BARTA) Conference</u> (Scotland – June 12-14, 2024)

Chris Riley (OVC) and Victor MacPherson (EG LAER lead instructor), both attended and presented, representing the EG LAER program at this international conference.

**July 1, 2024 -** On Canada Day long weekend, fire fighters from all over the province came to the University of Guelph to attend an intensive Large Animal Emergency Rescue (LAER) training program hosted by Equine Guelph. Firefighters from Hamilton, Milton, Lucknow, Chatsworth, Caledon, Halton Hills, West Elgin, Ramara, Oakville and

Essa Township participated in the two-and-a-half-day event, gaining essential skills for rescuing large animals during emergencies.



Equine Guelph Large Animal Emergency Rescue workshop participants at specialized training for Fire Fighters practiced a downed horse in trailer scenario. Trailer kindly provided by System Equine. Photo by: Susan Raymond

Participant and assistant trainer Andrew Brassage from Milton Fire department says "After 24 years in the fire service, I have both taken and taught classes in Canada and the USA. I will say that this was a top tier class and one of the best training experiences of my life. The facilities and props are world class, as are the staff and instructors. I would highly recommend it for all fire service members from the biggest to the smallest departments that might deal with situations that would involve the rescue of horses and other farm animals."

**October 18, 2024 –** Awareness level training for first responders in Essex County. This training was hosted by Windsor-Essex Therapeutic Riding Association (WETRA) & The County of Essex Emergency Measures Department. Thirty participants from fire departments, EMS, police services and veterinarians attended.

"Our organization was happy to support the training of first responders in our region to engage safely and effectively with large animal rescues," said Becky Mills, Executive Director of Windsor-Essex Therapeutic Riding Association. "We appreciate the work that goes into the planning and facilitation of this type of event, and we are so appreciative of the opportunity to learn. WETRA would not hesitate to work with this

fantastic group of professionals should a future opportunity arise, as this benefits so many of us in the agricultural sector and our community as a whole."



Lead Trainer, Victor MacPherson, assistant trainer Katherine Hoffman and Dr. Chris Riley, Chair of the Department of Clinical Studies at the Ontario Veterinary College.

**November 23, 2024** – Awareness level training for OVC veterinary students (Emergency Responders Club), University of Guelph

Equine Guelph and the Department of Clinical Studies presented this course. Thirty vet students attending the training session, and it was very well received.



**March 7, 2025 –** LAER Awareness Level Course – University of Guelph – 4<sup>th</sup> year OVC students as part of the Emergency Management elective.

**April 30, 2025** – LAER Awareness Level Course – Holly Oaks Farm Equestrian Facility 3517 Powerline Rd W, Lynden, ON – Hamilton Mounted Police and local area. Hamilton Mounted Police partnered with Equine Guelph for their fifth workshop, highlighting their commitment to enhancing their rescue skills. Additional attendees included York regional police, veterinarians and veterinary technicians.



"We were pleased to have members of the Hamilton Police Mounted Patrol Unit participate in the First Responder Refresher Course for Large Animal Rescue, presented by the University of Guelph", said Sergeant Amberlee Rodgers from the Hamilton Mounted Police. "Their commitment to ongoing training and collaboration highlights the importance of preparedness, safety, and animal welfare in emergency response situations. We value the expertise and partnership the University of Guelph and their team of instructors bring to these critical learning opportunities." Discussions are ongoing for additional 2025 hands-on training. Dates to be determined and expressions of interest are welcome.

**Confirmed:** Nova Scotia, at Whinny Hills Equestrian Centre, Lunenburg, Aug 15, 2025, Many thanks to Acera Insurance for providing sponsorship. Register through Nova Scotia Equestrian Federation:

https://forms.office.com/r/kCRkAFzY4c

#### Online awareness level course:

Online awareness level course is underdevelopment.

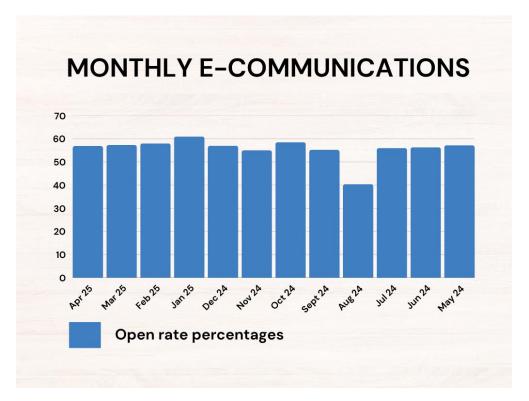
5 units – approx. 2hrs per unit

- Introduction to LAER Incidents involving animals
- Incident Command System related to LAER
- Introduction to large animal behaviours (Normal & Stress behaviour)
- Equipment and Techniques
- Scenarios and Next Steps

Expenditures for the education program were \$990,628. This was invested into new online program development, online education programs, virtual presentations and webinars. The online education tuition returned \$114,035 demonstrating continued interest in online education. More detailed information on the education program can be found in the appendices.

## Communications and Marketing

Equine Guelph continues to play a significant role in communication of important information and new findings from research since its inception in 2003. Our E-news subscribers are loyal as ever with open rates of 56%. Our media list also continues to be engaged with open rates rising from an average of 54% in 2023/24 to 55% in this fiscal year (the industry average open rate is 40% for an educational institute, as of December 2024, according to Constant Contact). Equine Guelph provides horse care and welfare news to this deeply-committed audience.



Media response continues to be high with ongoing pickup for the resources and courses offered by The Horse Portal. Support from Ontario Racing, Central Ontario Standardbred Association, Horseman's Benevolent Protection Association and Standardbred Canada gives Equine Guelph the ability to offer free courses for the racing sector, including respiratory health and gut health colic and ulcer prevention, for AGCO license holders and Standardbred Canada members. This project continues building on this successful partnership, first developed in 2020 (funded by AGCO). Media pick up of this program is excellent in the racing sector with ongoing coverage across many Standardbred, Thoroughbred, and Quarter Horse racing news sources and the racing media have responded with exceptional distribution of the Racing-Specific programs.

There is continued and growing media interest for the Large Animal Emergency Rescue program (LAER) with hands-on offerings to provide unique training needed by fire

fighters, first responders and the equine industry (both racing and non-racing sectors). Continued interest is shown by media for the promotional videos of the LAER program and new video content is being created. These can be found on the Equine Guelph YouTube channel.

#### Newsletter



Volume 22 of Equine Guelph's Research update was released in February 2025. It features research by associate professor at the University of Guelph, Wendy Pearson and Ph.D. candidate Dr. Nadia Golestani as they explore the benefits of supplementing Spirulina to help the equine athlete recover faster from intense exercise.

Equine Guelph's newsletter has major research focus along with providing updates on educational programs. The newsletter is partially supported by the industry investment into the research program as it extends distribution of research findings to the industry. A PDF copy is available on the Equine Guelph website. It is broadly advertised though the

Equine Guelph E-news and press releases.

The annual digital version of the Equine Guelph Research Update was well-received and recapped several 2024 research related news releases, complete with links to several video interviews with researchers.

There was a great deal of interest in an article on preventing dehydration, co-authored by Dr. Mike Lindinger and Equine Guelph director, Gayle Ecker.

Other research articles distributed via the monthly E-news and press releases that received high distribution included topics covering strangles testing, the debunked myth of blindfolding horses during emergencies, lesson horse welfare, and what to do when a broodmare fails to get pregnant. Video interviews continue to accompany many of the research features and are cross posted and disseminated through our social media channels, including the Equine Guelph YouTube channel.

Direct industry funding support for the Communications and Marketing program was \$38,000 for the year, which came through the Horse Improvement Program (HIP) / Horsemen's Benevolent and Protective Association of Ontario (HBPA).

#### Equine JobTrack

The equine industry across Canada continues to find it challenging to find employees for this labour-intensive sector. Equine JobTrack provides a free service to our industry for both job seekers and employers. It also continues to provide a major supporting role for the third year of the Ontario Equine Education and Employment program, as it is helpful to match students to facilities looking to hire grooms and caretakers in starting roles. Equine Guelph recognizes the important support of HBPA in the initial development of JobTrack and further funding from the Grand River Agricultural Society and Ontario Racing. Equine Guelph continues to feature resources for job seekers such as the Equine Careers Showcase.

Equine Guelph sincerely thanks HBPA, Ontario Racing, and Grand River Agricultural Society for their contributions that have enabled this valuable and free service to be upgraded and enhanced as a service to our industry. Equine JobTrack continues to be the top landing page on TheHorsePortal.ca

#### E-news & HEALTHflash

The dedicated Communications team of Equine Guelph continues to develop and distribute Equine Guelph's monthly e-news. This remains a free service to the industry helping our participants to remain updated and informed on area of health, welfare and safety and shows how the industry-funded research program continues to break new ground in equine health advances funded by industry support. New education and training opportunities are included to keep our industry up to date.

Through national and international media, strong pick-up continues for the e-news distribution as can be seen by the number of national and international media outlets that pick up the articles each month, showing that the Equine Guelph releases are valued as an important part of their efforts to keep the readership informed.

The support of our sponsors makes it possible for Equine Guelph to create and distribute HEALTH*flash* (since its inception in 2013), a quarterly communication consisting of 4 seasonal email reminders + monthly health alerts. Over ten years later, this publication remains one of our most popular forms of communication to an international audience thanks to distribution by media across Canada and the U.S. including regular support from the Canadian provincial equine associations, HorseJounals.com, SystemEquine.com and The Rider, among a growing number of others.

#### Website

In February 2025, Equine Guelph proudly launched a redesigned version of its flagship website, **EquineGuelph.ca**, offering a more intuitive and user-friendly experience. The updated site is structured around three core pillars—**Research**, **Education**, and **Careers**—making it easier than ever for users to access our globally recognized equine education programs and the latest research news.



The redesign reflects our commitment to accessibility and innovation, ensuring that students, industry professionals, and horse owners can quickly find the information and resources they need.

Meanwhile, **TheHorsePortal.ca** continues to serve as the central hub for our online course offerings. This virtual learning platform delivers accessible, industry-relevant training across all sectors of the equine industry, supporting our mission to improve equine welfare through education.

TheHorsePortal.ca page views are 241,739 and the combined total of page views for this fiscal year to both EquineGuelph.ca webpages and TheHorsePortal.ca are 284,739.

The top landing page on TheHorsePortal.ca is EquineJobTrack.ca with 34,735 visits followed by the home page and educational online course listings.

The Pregnancy Wheel connected to the Mare and Foal healthcare tool continues to be a popular feature with almost 4,500 views. The most frequently visited educational course offering this fiscal year was the Horse Sickness Prevention course. This was due to a special free offering on World Horse Day.

#### YouTube Channel Growth – A Year of Exceptional Engagement

Equine Guelph's YouTube channel continues to gallop ahead with remarkable momentum! This fiscal year, we experienced an extraordinary 175% increase in traffic, reaching an impressive 279,439 visits—another significant leap from last year's 154% growth and 101,600 visits.

Our content continues to resonate deeply with our audience.

Top Performer: The Research Annual feature on Spirulina emerged as the most-watched video, sparking widespread interest in equine nutrition and innovation.

Lameness Lab Series: These interactive videos remain a viewer favorite, challenging equine enthusiasts and professionals alike to sharpen their skills in visually identifying lameness in horses.

Large Animal Emergency Rescue: Technique review videos from this vital course continue to draw strong engagement, underscoring the importance of preparedness and safety in equine care.

This sustained growth reflects our commitment to delivering high-quality, educational content that empowers the equine community. We're excited to build on this momentum and continue expanding our digital reach.

#### Media, Seminars and Presentations, Association Targeted Communication

Equine Guelph continues to maintain a strong media presence and industry voice through regular press releases, presentations, and targeted communications. In 2024–25, over **279 articles** were published in equine industry media, highlighting our programs and research (see Appendix 12). A full list of seminars and presentations by Equine Guelph staff is available in **Appendix 8**.

Our communications are designed for easy integration into both print and digital formats, ensuring wide accessibility. Coverage spans both racing and non-racing sectors, with consistent features in publications such as: The Rider Magazine, Horse-Journals.com, Standardbred Canada, EquiMed, Horse-Canada, Horse Sport, Ontario Veterinary College Bulletin, The Paulick Report, Small Farm Canada, Harness Link and Wellington Advertiser.

We distribute two press releases monthly through American Horse Publications, reaching a broad list of equine media groups throughout the United States.

International media interest continues to grow, with features in HarnessLink.com (Globally distributed, tailored to Standardbred racing audience), EquiMed.com (California, USA), EquineChronicle.com (Florida, USA), EquusMagazine.com (USA media partner of the American Association of Equine Practitioners), Equine Science Update (UK with global distribution), American Riding Instructors Association (USA), Cayuse Communications

(USA), and the Northwest Horse Source (Colorado USA), and EverythingHorseUKco.uk (UK with distribution beyond UK) and others.

New media interest was received from Colorado Horse Source, Catskill Horse, Virginia Horse Racing, My Senior Horse, NewsBreak.com, Stream Horse TV, The Plaid Horse and Equine Disease Communications Center (USA).

In 2025, Trainer Magazine committed to featuring Equine Guelph research in all four of its North American issues, with some articles also appearing in their European edition, reaching the thoroughbred racing industry on a global scale.

#### **Awards and Recognition**

Significant media attention followed two prestigious awards presented to Equine Guelph's Director, **Gayle Ecker**:

- On October 22, 2024, she was honoured for over 20 years of leadership and recognized for inspiring a transformative \$7 million bequest from the Estate of Donna Moore designated for the Centre's operations and equine research with a specific focus of supporting equine welfare.
- On January 24, 2025, she received the King Charles III Coronation Medal for her contributions to Canada and international impact.



#### **Featured Coverage**

Equine Guelph research was prominently featured in *Canada's Equine Guide 2025* by *Horse Journals*, including a special tribute to **Dr. Susan Raymond** for her leadership in the Large Animal Emergency Rescue (LAER) program. The LAER program also received national TV coverage from **CTV** and **CBC News**.

#### **Association and Partner Engagement**

Equine Guelph maintains strong partnerships with provincial equine associations, which actively promote our programs, including *TheHorsePortal.ca*. **Ontario Equestrian (OE)** continues to be a key partner, supporting communications through social media and e-blasts. OE has been instrumental in promoting the *Ontario Equine Education and Employment Program (OEEEP)*. Important partnerships have been developed with OE including a program to contribute to research support.

Additional support comes from sponsors and associations that help disseminate information on research and education/training initiatives including: The Horse Portal course offerings, racing industry specific courses, 12–week courses and more. Our outreach is further amplified through links from organizations such as **Equestrian Canada**, **Acera Insurance**, **SystemEquine.com**, and various veterinary and social media platforms. Our sponsors and associates direct the public to Equine Guelph's online courses, horse owner tools and research. Particular interest was paid to an Equine Law webinar with Equine Law specialist, Catherine Willson, BA, LLB.

The Horse Portal has linked 10 provincial equestrian federations nation-wide, as well as the OSPCA, Campbell Centre for the Study of Animal Welfare, Ontario Racing, Horse Racing Alberta, Standardbred Canada, 4-H Ontario, Canadian Therapeutic Riding Association, Equestrian Connection and Saddle Up Safely, each with their own unique landing page generating traffic to the short courses offered by Equine Guelph.

#### Information Inquiries

Although Equine Guelph's overall reach remained steady in 2024–25, the volume of information requests continued to rise—highlighting our ongoing role as a trusted source of knowledge and support for the equine industry.

In 2024–25, we received a steady number of inquiries on a wide range of topics, including emerging health concerns, disease outbreaks, welfare issues, and environmental impacts. Many of these requests come from across Canada and internationally, reflecting our expanding global presence. Employment-related inquiries are directed to our **Equine JobTrack** platform.

Equine Guelph is increasingly recognized as a central information hub for the equine industry in Ontario, across Canada, and beyond. Our role extends beyond education and

research to include support for industry development, sustainability, and environmental resilience—particularly in response to challenges such as wildfires and their impact on horse owners.

The most common topics of inquiry include:

- Respiratory health concerns related to wildfire smoke and air pollution
- Heat stress and seasonal health risks
- Colic and ulcer prevention
- Nutritional guidance
- Euthanasia and disposal options
- Career pathways and training opportunities
- Large Animal Emergency Rescue (LAER) courses
- Biosecurity and current disease outbreaks
- Accessing reliable information on new diseases, medications, and diagnostics
- Welfare concerns, including veterinary shortages, equine welfare inspections, transportation, and facility management

This growing demand underscores the importance of our communications and outreach efforts, as we continue to serve as a vital source of accurate, timely, and trusted information for the equine community.

## **Development & Sponsorship**

#### A. Equine Guelph 'Helping Horses for Life' Annual Fund Giving Campaign:

The following information reflects fundraising initiatives and private donations for FY2024-25:

Annual Fund Giving	FY23-24 Amount Raised	FY24-25 Amount Raised	FY24-25 No. of Unique Donors	FY24-25 Median Gift
OE Welfare Education Fund	\$50	\$1,693	2	\$847
Education	\$11,661	\$6,045	11	\$150
Research (donations only)	\$3,680	\$5,745	28	\$50
Greatest Need	\$29,586	\$28,755	58	\$100
Totals	\$44,977	\$42,238	99	-

TABLE I - Funds raised from private donations to EG accounts during FY23-24 and FY24-25 including number of unique donors and the median size of gift for each account

**Annual Appeal:** The appeal was mailed in October 2024 with the e-chaser e-mail in November 2024. Equine Guelph sent the appeal to past donors and to an acquisition segment – 1,091 portal students (with consent).

The following stats measure the gifts from this mailing and online initiative:

OCT MAILING	FY23-24	FY24-25	NOV E-MAIL CHASER	FY23-24	FY24-25
Recipients	228	245	Recipients	118	178
Total cash-in	\$3,880	\$2,140	Total cash-in	\$4,150	\$2,550
Total donors	33	24	Total donors	8	10

TABLE II – Comparison of select metrics for the past two appeals.

#### Ontario Equestrian Annual Membership Mailing Fundraising Program:

Each year Ontario Equestrian (OE), through its annual membership renewal form, gives its members an opportunity to donate to a cause (Equine Guelph is one option on a list of choices). OE raised **\$1,093.50** from its members in FY2024-25.

#### B. Major Estate Giving:

The following information reflects major/estate gifts, both endowed and expendable funds, in FY2024-25:

**Grand River Agricultural Society** (funding Education): GRAS made a three-year commitment of \$180,000 in support of the following EG initiatives: Equine JobTrack, Large Animal Emergency Training and Youth Programming. The donation for the first year, FY2024-25, was \$60,000.

**Kerr Fund for Equine Education and Community Outreach** (funding Education): The purpose of the Fund is to support ongoing base operational funding for EG horse education, communication and community outreach initiatives. As of April 30, 2025, the endowment principal is \$33,119.

#### OVC Equine Guelph - Estate of Donna Moore Endowment &

**OVC Equine Research - Estate of Donna Moore Endowment** (funding Research & Education/Communications): Endowed and expendable funds from the estate of Donna Moore were donated to fund now and in perpetuity, equine research and education/communications supporting research. Income from the endowment will be allocated annually, and as of April 30, 2025, the principal for research is \$3.91 million, and for education \$1.0 million.

#### C. Funding for Research:

Equine Guelph supports several high-quality projects at the University of Guelph, by virtue of funding provided largely by the racing industry (Standardbred, Thoroughbred and Quarter horse organizations): the Horse Improvement Program (HIP) and The Horsemen's Benevolent and Protective Association (HBPA), as well as annual endowment allocations from the E.P. Taylor Fund.

The following information reflects major funding from the Ontario equine industry and the E.P. Taylor fund directed to the research programs in FY 2023-24 and 2024-25:

Funding Designated for Research	FY23-24 Funding	FY24-25 Funding
HIP	\$125,000	\$125,000
НВРА	\$65,000	\$65,000
E.P. Taylor Fund	\$99,720	\$103,231
Totals	\$289,720	\$293,231

TABLE VI – Comparison of research funding received over the past two years.

**Horse Improvement Program:** HIP is overseen by Ontario Racing with a percentage of the wagering handle from Thoroughbred, Standardbred and Quarter Horse racing in Ontario directed to racing-related research funding.

**HBPA:** The HBPA represents owners and/or trainers of thoroughbred racehorses, and the organization has supported the research program since Equine Guelph's inception in 2003. In FY2024-25, HBPA provided \$65,000 in support of racing-related research funding.

**EP Taylor Fund (funding Research):** Started by leaders in the Thoroughbred industry, the EP Taylor Fund is now maintained in trust by the University and Equine Guelph. Interest derived from the fund annually is made available for Equine Guelph funded research projects as prioritized by the EG Research Committee.

#### D. Sponsorship Program – Funding Education Programs:

The FY2024-25 sponsorship program revenue increased from the year before (\$77,255), adding two new\* sponsors for Equine Guelph's education program. Total revenue from the corporate sponsorship program was \$97,150.

Sponsor	Education Initiatives	Revenue
Acera Insurance Services Ltd.	Colic Prevention Education Month (tool/course), Hoofprints program, lameness course, portal PTSO partner pages, risk brochures	\$15,000
Boehringer Ingelheim Canada	EG E-News & Senior Horse Education Month (tool/course)	\$13,500
Central Ontario Standardbred Association	Free racing-exclusive courses (respiratory & gut health)	\$5,000
Equine Disease Communication Center*	Biosecurity Tool upgrade	\$10,000
HBPA*	Free racing-exclusive courses (respiratory & gut health)	\$5,000
Kubota Canada Ltd.	Online behavior & safety courses (youth & adult offerings)	\$5,000
Masterfeeds	Equine Nutrition Education Month (body condition scoring course/tool)	\$10,000
Ontario Racing Management	Free racing-exclusive courses (respiratory & gut health)	\$9,000
	Horse eCamp (online education program for youth)	\$10,000
Standardbred Canada	Free racing-exclusive courses (respiratory & gut health)	\$2,300
U of G Experiential Learning Hub	Equine JobTrack ad	\$1,050
Zoetis	Vaccination Education Month (tool/course), World Rabies Day promo	\$11,300
Total		\$97,150

TABLE VII – Represents sponsorship funds from FY2024-25

#### E. Equine Guelph Store

Equine Guelph retails laminated barn posters at major events and through mail-order. Total poster revenue in FY24-25 was \$244.06.

#### **Financial Report**

The Year End Financial Report is included in the Appendices. Quarterly reports are produced for the Equine Guelph Advisory Council. Financial reports include forecasting of revenue and expenditure for each of the program areas and year-to-date statements. Equine Guelph revenue totaled \$983,938 (compared to \$800,730 for previous year) for the fiscal year with funding provided by our funding partners, donations, and online course tuition. Program expenditures totaled \$990,628 (\$1,194,709 last fiscal year).

The research program allocated \$301,573 for research projects, and \$228,040 was distributed to researchers this fiscal year. Further distributions of funds will be completed in the next fiscal year, as some projects are still awaiting receipt of their Animal Utilization Protocol (AUPs) to begin their work.

Expenditures for the education and communications program were \$760,834, which included program development, online education programs, and marketing. Online education tuition returned a total of \$114,035 (compared to \$146,995 from last fiscal Year: more Horse Portal course revenue is sourced from sponsorships, rather than individual Portal registrations).

While there are still challenges for ongoing stability in funding from the racing industry, funding levels have been consistent in recent years. Industry funding was \$38,000, which equals what was contributed the previous two fiscal years. This funding is used for the support of administration of the research funded program and direct-to-industry communications on the research program.

The majority of funding for the education/communications program continues to come from tuition, sponsorships, in-person training, and the Ontario Equine Education & Employment Program. Research funding continues to be a source of significant concern going forward without specific designated funding identified and protected. While funding has remained somewhat steady in recent years, the goal of stable consistent funding for the programs of Equine Guelph, as a Centre at the University for the horse industry will continue to be an issue of high priority as the industry continues with its efforts to develop a re-organized model that provides it with a sustainable business model. Research and education/training of the members of the racing and non-racing community will continue to be an important part of future success.

## **Highlights and Special Events**

#### May 2024 - April 2025

Welcome to our highlight reel. If you would like to know more about any of the following press releases, click on the titles to follow the web link to the full story.

## Apr30

#### Be Pro-active Rather than Reactive with Biosecurity

"In the equine industry, true biosecurity is hard to achieve because horses move around a lot, and many diseases are always present," says Ontario Veterinary College infectious disease specialist Dr. Scott Weese. "However, it's still important to try to prevent diseases from entering...

## Apr28

#### **Group Announces Ontario Equine Agricultural Economic Impact Study**

An industry steering committee of Ontario horse people is leading a project to conduct a comprehensive economic impact study of the vast and diverse Ontario equine agricultural sector...

## Apr22

#### Get Ready for Hay Season: Forage Course Helps You Feed Smarter

Hay season is just around the corner, making this the perfect time for horse owners to cultivate their forage knowledge. Equine Guelph is offering its popular Introduction to Forage short course...

## Apr2

#### What do we Know about Colitis in Horses?

The short answer is not enough is known about this all-too-common veterinary emergency. "Colitis in horses is very complex and can be affected by several factors," says Ontario Veterinary College researcher, Dr. Luis Arroyo. There is a need to improve diagnostic protocol...

## Mar 17

#### EquiMania! and TheHorsePortal.ca Offer Resources for Ag Safety Week

March 16 – 22, 2025 marks Canadian Agricultural Safety Week (CASW) – an annual campaign held every third week of March. EquiMania!, Equine Guelph's youth program, is proud to support the #FarmSafetyEveryday campaign with a variety of free...

## Mar4

#### **New Online Course for Youth Interested in Careers in the Horse Industry**

Equine Guelph is excited to announce the launch of a new online course designed specifically for youth aged 13-17 who are passionate about horses and interested in exploring careers in the horse industry...

### Mar4

#### More than 'Four on the Floor' with Equine Guelph Horse Trailer Safety Course

Everyone wants stability and control when setting off on an adventure with their four-legged friends. Your season of safe journeys begins with many crucial safety checks. Equine Guelph's Horse Trailer Safety course...

#### Mar3

#### March Kicks off Vaccination Season!

Safeguard Your Equine Partner Equine Guelph's Vaccination Equi-Planner is a cutting-edge healthcare tool designed to help horse owners protect their valuable equine partners...

## Feb25

#### **Horse Heritage Movie Night in Erin**

Wednesday, March 26, 2025, at Erin Centre 2000 come out for a special evening celebrating Erin's rich equine history at the Horse Heritage Movie Night! Equine Guelph was present to promote the Ontario Equine Education and Employment Program.

## Feb20

## **Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day**

Free Global Registration for One Day Only! World Horse Day has been celebrated on March 1<sup>st</sup> every year since it was created in 2005 to raise awareness of equine welfare and protection...

## Feb11

## **Equine Guelph Launches Biosecurity Risk Calculator 2.0 with New Partner, Equine Disease Communication Center (EDCC)**

Equine Guelph is excited to announce the relaunch of its newly upgraded Biosecurity Risk Calculator, an innovative online healthcare tool ...

## Feb4

#### Racehorse Gut Health & Ulcer/Colic Prevention Course on TheHorsePortal.ca

Equine Guelph is pleased to announce the return of its highly popular online course, Racehorse Gut Health & Ulcer/Colic Prevention...

## Feb3

## **Equine Guelph Launches New Website Serving the Global Horse Community**

Equine Guelph is excited to announce the launch of its newly redesigned website...

### Feb3

## King Charles III Coronation Medal Awarded to Equine Guelph Director Gayle Ecker

On Friday, January 24, Gayle Ecker, director of Equine Guelph, was presented with a King Charles III Coronation Medal...

## Jan 29

#### **Equine Guelph 2025 Research Annual**

Equine Guelph Research Annual - Volume 22 ...

## lan29

#### **Can Spirulina Help Horses Recover Faster from Intense Exercise?**

Elevating performance and seeking the competitive edge is what makes equine supplements a billion-dollar industry, but what makes the difference between a supplement that creates expensive urine...

## Jan 27

#### **Equine Guelph's "Colic Prevention Month" Serves Easy-to-Digest Tips**

February is Colic Prevention Month at Equine Guelph, when all horse owners are encouraged to raise their awareness about colic, the number one killer of horses. Take 10 minutes and visit the FREE interactive Colic...

## Jan 1

#### Ring in the New Year with a Free Horse Behaviour & Safety Course for Youth

On-Demand Horse Behaviour and Safety course for youth will be FREE from January 1 – March 31, 2025, to youth who love horses...

## Jan 1

## Make 2025 the Year of Optimal Equine Nutrition: Join the Body Condition Scoring Course

This January, Equine Guelph invites horse owners to make a meaningful New Year's resolution; take charge of your horse's nutrition and health through an instructor-led Body Condition Scoring Course...

## Dec 13

## Racehorse Respiratory Health Online Course Back by Popular Demand

Thanks to a partnership between Equine Guelph and Ontario Racing, Standardbred Canada, The Horsemen's Benevolent and Protective Association (HBPA) and Central Ontario Standardbred Association (COSA) this offering will be available **FREE**...

### Dec4

#### Emily McNulty Awarded 2024 Roger L'Heureux Memorial Equine Award

Emily McNulty, a third-year student in the University of Guelph Equine Management program, will receive two online courses through Equine Guelph valued at \$625 each...

### Dec2

#### A Royal Review of Successful Careers in the Horse Industry

The equine industry in Ontario is a multi-billion-dollar sector, and finding one's way to the top may seem beyond reach. Interviews with top competitors and industry professionals at the 2024 Royal Agricultural Winter Fair in Toronto revealed key ingredients...

## Dec2

#### **Study Looks at Welfare of Lesson Horses**

University of Guelph researchers share preliminary results of a study suggesting bigger may not necessarily be better when it comes to riding school programs and equine welfare. Other researchers have shown that riding lesson horses have poorer welfare compared to pleasure horses...

## Nov28

#### **OVC Veterinary Students Train for Large Animal Emergency Rescue**

A specialized workshop for veterinary students held at the University of Guelph campus on November 23, 2024, was presented by Equine Guelph and the Department of Clinical Studies, Ontario Veterinary College...

## Nov26

## Industry Ambassadors Announced for Free Online Racing-Exclusive Training Program

Julie Walker and Renée Kierans have been selected to represent the horse racing industry as Ambassadors of an Equine Guelph initiative...

## Nov6

## Large Animal Emergency Rescue Awareness Training for First Responders in Essex

On Friday, October 18th, first responders in Essex County received specialized training in emergency procedures to extricate large animals from tricky situations. This training was hosted by Windsor-Essex Therapeutic Riding Association (WETRA) & The County of Essex Emergency Measures Department and facilitated by Equine Guelph, at the University of Guelph...

## Oct 29

#### **Equine Guelph Announces Poll & Free Online Courses for Racing Industry**

Equine Guelph will offer two free racing-exclusive online courses on TheHorsePortal.ca in the winter of 2025 and conduct a Horse Racing Industry Poll this fall/winter...

### oct 23

## Gayle Ecker acknowledged for Equine Guelph leadership, inspiring a \$7 million bequest

On October 22 at the Arboretum Centre, Director Gayle Ecker was honoured for her more than 20 years of leadership at Equine Guelph. She was also recognized for inspiring a transformative bequest of approximately \$7 million from the Estate of Donna Moore designated for the Centre's operations and equine research....

## Oct9

#### **Youth Derby Awards Presented**

The Youth Derby Awards were presented by the Bill Galvin Racing Alliance, providing finalists with an unforgettable experience throughout the day and evening on Oct 5, 2024. Equine Guelph was proud to be a part of the wonderful awards...

## Sep27

#### What if my Mare did not get Pregnant?

If entering the fall, your breeding prospect has come up empty, there are considerations to ponder and actions you can take for successful breeding next year. "Don't let those mares sit all fall and winter, with untreated conditions such as a uterine infection," says Dr. Tracey Chenier...

## Sep27

#### **Equine Law Webinar**

On Aug 29, 2024, the equestrian community was afforded with a free Equine Law Webinar from Canada's leading Equine Law specialist, Catherine Willson, BA, LLB...

## Aug28

### World Rabies Day 'One Health' Approach and the Horse Owner

On September 28, 2024, Global Alliance for Rabies Control (GARC) coordinates World Rabies Day and this year's theme is 'Breaking Rabies Boundaries'. In the 'One Health' approach, every sector takes responsibility in the effort to tackle rabies...

## Aug 22

#### Senior Horse Education Month Features Arthritis and Pain Recognition

Chronic pain and lameness resulting from osteoarthritis (OA) and other musculoskeletal conditions are the most common causes of poor quality of life in senior horses. In September, Equine Guelph promotes...

## Aug 22

#### Equine Studies Online: Transforming Dreams through the Power of Education

Dana Willett's lifelong passion for horses transformed over many years, evolving into a dream both simple and profound...

## Aug6

#### Advocating for the Underdog through Education in Equine Welfare

Imagine if a dedication to the underdogs became a life mission. Meet Stacey Iverson, one of OpenEd's Equine Studies Online students currently completing the Certificate in Equine Welfare...

## Jul23

#### Stepping Out of the Dark with a Study on Blindfolding Horses

If you are a Black Beauty fan, you will recall the scene where Beauty is being led from a burning barn and he's scared. James puts the blindfold on to instantly calm him down, and then he's able to be rescued. Written in 1877 by Anna Sewell, the novel was based on how horse handling...

## Jul 22

#### **Equine Guelph Annual Report**

Equine Guelph has posted its annual report for May 2023 – April 2024. All the success stories for the past fiscal year are showcased from launching new courses to responding to our readers with the resources you asked for...

## Jul8

## Ontario Firefighters Trained in Large Animal Emergency Rescue Techniques at Equine Guelph

On Canada Day long weekend, fire fighters from all over the province came to the University of Guelph to attend an intensive Large Animal Emergency Rescue (LAER) training...

## Jun 26

#### From Passion to Profession: Shelby Embraces Equine Science

Shelby Dennis's story is a testament to the power of perseverance and the transformative impact of education. Her journey with Equine Guelph's Online Science Certificate program and the Roger L'Heureux Tuition Award is a narrative of triumph over traditional expectations...

### Jun 19

### **Researching Biomarkers to Understand Joint Health**

Horses, like humans, can suffer from joint diseases such as Osteoarthritis (OA) and Osteochondritis dissecans (OCD), which can lead to pain and lameness. Diagnosing these conditions early is challenging. OVC researchers are investigating tiny molecules called microRNAs (miRNAs)...

### **Jun 17**

#### **Preventing Dehydration in Horses**

Authors: Dr. Mike Lindinger & Gayle Ecker. With exercise, the body temperature rises. This heat must be dissipated, or the horse will literally "cook"! The body cools itself through the evaporation of sweat, so sweating is especially important for the exercising horse. The sweat contains water and electrolytes, or salts...

### Jun2

#### **Horse Trivia Time!**

Are you ready for an e-book full of fun facts all about equines? Equine Connection and Equine Guelph have partnered on an online educational initiative, "Who Knew? Fun Facts & Why it Matters. After collecting input from our followers and adding a few of our own...

### **Мау**31

### Study to Examine Selenium blood concentration in Ontario Broodmares and foals

Selenium deficient soil can lead to several conditions in domestic animals including white muscle disease. Of importance to Ontario horse breeders is the fact that most foals are born with low blood selenium...

### May 28

#### **Equine Guelph Healthcare Tools for the Win!**

One can go down many rabbit holes searching on the internet for horse health advice, and Dr. Google is known to serve up many popular myths. Over the years, Equine Guelph, the Centre for the horse at the University of Guelph has developed twelve free interactive online healthcare tools...

### **Summary of Highlights**

As Equine Guelph entered its 21st year as the "Centre for the Horse Owner at the University of Guelph," 2024–25 proved to be a dynamic and impactful year, marked by continued momentum and meaningful achievements.

A major gift from the Estate of Donna Moore that will help support research studies on equine welfare and education programs for horse owners to support welfare with this transformational gift.

Gayle Ecker and the Equine Guelph team were honoured by the equine industry for over two decades of dedicated service. Their commitment to developing impactful programs and fostering partnerships has strengthened Equine Guelph's leadership in equine health, welfare, and safety.

Gayle Ecker receives the King Charles Coronation Medal for her work in building an internationally recognized Centre at the University of Guelph and her dedication to promoting equine welfare.

Equine Guelph unveiled a redesigned website, offering an enhanced user experience and a more effective platform to showcase its programs, resources, and research.

In collaboration with the Equine Disease Communication Center and the American Association of Equine Practitioners, Equine Guelph launched an updated Biosecurity Calculator. This tool provides the industry with a robust resource for developing and maintaining biosecurity and disease prevention plans.

The Large Animal Emergency Rescue (LAER) program saw significant growth, with increased demand for training courses across Ontario and beyond, reinforcing the importance of emergency preparedness in the equine sector.

Development of the Racing courses for Ontario racing industry, now numbering 3 (Colic and Ulcer, Lameness and Respiratory) and a 4<sup>th</sup> one, Conditioning the Racehorse, under development.

Renewal of the Ontario Equine Education and Employment program from the Ontario government to continue this valuable program to the industry for its third year.

#### **Our Deepest Thanks to Our Supporters**

Equine Guelph is deeply grateful for the invaluable advisory input and financial support we receive from our Council, donors, partners, and students. Your contributions are

instrumental in shaping our direction and enabling the development of new and enhanced programming.

We extend our sincere thanks to the members of our Advisory Council and our dedicated funding and supporting partners:

**Central Ontario Standardbred Association** 

**Canadian Thoroughbred Horse Society** 

E.P. Taylor Equine Research Fund

**Equestrian Canada** 

**Grand River Agricultural Society** 

Horsemen's Benevolent and Protective Association of Ontario

**Ontario Equestrian** 

**Ontario Harness Horse Association** 

**Ontario Ministry of Agriculture, Food and Rural Affairs** 

**Ontario Racing** 

**Ontario Veterinary College** 

**Quarter Racing Owners of Ontario, Inc.** 

**Standardbred Canada** 

Standardbred Owners Association of Ontario

**University of Guelph** 

We also extend heartfelt appreciation to our generous donors, partners, and sponsors. Your ongoing support helps us cover essential administrative costs and continue developing impactful programs for the equine community.

We couldn't do it without you—thank you!

### **Appendices**

### **Appendix 1: Current Equine Guelph Advisory Council**

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### **Appendix 2: Equine Guelph Partners**





### E.P Taylor Equine Research

























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### Appendix 4: Research Projects for 2024-2025

### New Projects in 2024-25:

Investigator

	Development of a Core Outcome Set for Studies of Acute Colitis in
Arroyo, L.	Horses
	Dormant uterine Streptococcus equi spp zooepidemicus infections in
	broodmares: evaluating the potential diagnostic utility of cytokines and
Chenier, T.	chemokines
	Optimization of Perioperative Fluid Therapy in Horses: Establishing
Kerr, C.	Dosing Recommendations Through Volume Kinetics
	Do Activated Umbilical Cord Blood-Derived Mesenchymal Stromal
Koenig, J.	Cells Treat Equine Fetlock Osteoarthritis Effectively?

Merkies, K. and Riley, Exploring the effects of equine behaviour education on equestrian

behaviour and lesson horse welfare

Title

Development of an intraluminal arytenoid abduction device (ILAD)

P. Factors associated with cardiac arrhythmia in Standardbred

### **Continuing Projects:**

McCarrel, T.

Physick-Sheard,

and Pyle, G.

### Investigator Title

racehorses

Arroyo, L.	Improving Methods for Detection of Intestinal Dysbiosis in Horses			
Arroyo, L.	Pulse Wave Velocity in Equine Palmar Digital Arteries and Laminitis: A Pilot Study			
Arroyo, L.	The longitudinal development of the fecal microbiome and metabolome in neonatal foals			
Arroyo, L.	Improving fecal transplantation in horses: determining optimal conditions for preparation & storage			
Arroyo, L.	Screening for biomarkers indicators of intestinal health among the equine microbiota			
Avison, A.	Equine Myocardial Ion Channel Expression			
Avison, A.	Cardiac dysfunction and sudden death in horses			
Beeler-Marfisi, J.	The relationship between EIPH and exposure to ambient air pollution in Thoroughbred and Standardbred racehorses			
Beeler-Marfisi, J.	Identification of putative exercise-induced pulmonary hemorrhage causing variants in Ontario's Thoroughbred racehorses			
	Macrophage responses of healthy and severely asthmatic horses to			
Beeler-Marfisi, J.	agents that exacerbate equine asthma			
Changoor, A. &	Portable Electroarthrography & Biomechanical Measurement System			
Koenig, J.	to Evaluate Equine Cartilage Quality at the Point-of-Care			

Changoor, A. &	Evaluation of Non-invasive Electroarthrography to Predict Cartilage		
Koenig, J.	Quality in Equine Osteoarthritis  Efficacy of an Oral Supplement Containing Omega Fatty Acids for		
	Treatment of Persistent Breeding-Induced Endometritis (PBIE) in		
Chenier, T.	Mares.		
,	Evaluation of factors contributing to upper airway obstruction through		
	repeated resting and dynamic respiratory endoscopies in 2-year-old		
Cote, N.	Standardbreds		
Gomez, D.	Hypotonic versus isotonic maintenance fluids in critically ill foals		
	Enteroinsular axis in healthy horses and horses with gastrointestinal		
	diseases during hospitalization		
Gomez, D.	Total and some matchalams and food bile soids and Dilectors		
Gomez, D.	Fecal and serum metabolome and fecal bile acids and D-lactate concentrations in healthy horses and horses with colitis.		
Gorriez, D.	Cardiovascular effects of rapid and slow intravenous administration of		
	sodium penicillin in horses undergoing exploratory laparotomy for		
Gomez, D.	colic: A randomized clinical trial.		
Koch, T.	Enhancement of Immune-Modulatory Properties of eCB-MSCs		
Koch, T.	Assessment of Safety and Potential of antisense miRNA-181 to treat fetlock OA		
Koch, T.	Mesenchymal stromal cells for the treatment of equine tendonitis		
Koenig, J.	Can 10 or 20 Million Umbilical Cord Blood-Derived Mesenchymal Stromal Cells Treat Equine Fetlock Synovitis Effectively?		
Koenig, J.	Mesenchymal stromal cells for the treatment of equine osteoarthritis		
Muñoz, A.	Near-infrared display of indocyanine green in intraoperative tissue blood flow and tissue perfusion of healthy equine small intestine under laparoscopic guidance		
Pearson, W.	New insights into immunomodulatory effects of Spirulina in vitro		
Riley, C.	A Prospective Study of Antimicrobial Susceptibility and Multidrug Resistance in Bacteria Isolated from Diagnostic Samples from Foals in Ontario		
Torrent, A.	Fecal Microbiota Transplantation in horses via Pelvic Flexure Enterotomy during Colic Surgery		
Valverde, A.	Comparison of two intraoperative lidocaine constant rate infusions on cardiorespiratory function and quality of recovery in healthy isoflurane-anesthetized horses undergoing elective surgery		
zur Linden, A.	Equine Pulmonary Biopsy: Improving Safety and Efficacy		

### Appendix 5: Lay Summaries of Research Projects for 2024-2025

#### **New Projects**:

#### Arroyo, L. - Development of a Core Outcome Set for Studies of Acute Colitis in Horses

Acute colitis is a condition that significantly affects equine health, potentially leading to systemic complications, prolonged recovery times, and economic challenges for the equine industry. Despite its high prevalence and impact, the condition remains poorly understood due to the complexity of its risk factors and the lack of standardized diagnostic protocols. To address this gap, this study aims to establish a core outcome set (COS) for acute colitis in horses. The COS will provide a standardized collection of outcomes for all trials involving this condition, enhancing the consistency and comparability of research. The development process will include a scoping review of current diagnostic criteria, semi-structured interviews with experts, and a Delphi survey to reach consensus on important outcomes. The expected outcome of this study is the creation of a globally recognized COS for acute colitis, which will improve the quality of clinical trials, facilitate evidence synthesis, and advance our understanding of the disease. This standardization will benefit both researchers and veterinary practitioners, ultimately supporting better diagnosis, management, and treatment of acute colitis in horses, and improving equine health and welfare.

# Chenier, T. - Dormant uterine Streptococcus equi spp zooepidemicus infections in broodmares: evaluating the potential diagnostic utility of cytokines and chemokines

The health of the breeding industry is critical to the overall success of the horse industry. Reproductive efficiency in horses is generally low, for a variety of reasons, including infertility caused by uterine disease. Endometritis is the third most common medical condition encountered overall in equine veterinary practice, and approximately 60% of mares affected by endometritis are barren. Given the large number of horses in the breeding sector both in Ontario and Canada as a whole, endometritis causes significant economic impact to both the Canadian and Ontario breeding industries. Causes of endometritis include acute bacterial infections, chronic infections, and persistent breeding-induced inflammation (PBIE). Some mares harbour dormant bacterial infections deep in the uterus that are difficult to diagnose and treat yet still cause infertility due to inflammation. That uterine inflammatory response can be characterized by alterations in cytokines, proteins produced by cells that have an effect on the immune system to fight disease. Levels of both pro-inflammatory and anti-inflammatory cytokines are different between mares with endometritis or degenerative endometrial fibrosis versus normal mares. Using samples collected during our recent clinical trial from mares that cultured positive for bacteria on a uterine swab, this study will evaluate uterine cytokines as a diagnostic test for identifying mares with a dormant Strep zoo bacterial infection. The results of this study could lead to earlier diagnosis and treatment, resulting in improved fertility outcomes for affected mares.

# Kerr, C. - Optimization of Perioperative Fluid Therapy in Horses: Establishing Dosing Recommendations Through Volume Kinetics

Intravenous fluids are routinely administered to healthy sedated and/or anesthetized horses to replace fluid losses and maintain tissue perfusion; however, data on their distribution and elimination are scarce. Volume kinetic analysis (VKA) is a technique used to evaluate the distribution and elimination (disposition) of fluids within body compartments. This study aims to assess the pharmacokinetics of intravenous fluids in conscious and sedated healthy horses using VKA. We hypothesize that fluid distribution and elimination will differ between conscious and sedated horses, with suboptimal distribution and elimination in both. The study will employ a randomized cross-over design with two experimental groups: a sedated group and a control group. All horses will receive intravenous fluids. Samples will be collected and VKA analysis will

be performed. Results from this study will facilitate the establishment of guidelines for intravenous fluid doses and administration rates in healthy horses

# Koenig, J. - Do Activated Umbilical Cord Blood-Derived Mesenchymal Stromal Cells Treat Equine Fetlock Osteoarthritis Effectively?

Osteoarthritis (OA) is a common, progressive joint disease in horses that leads to permanent changes in joint structure and function, often causing lameness and reducing performance in athletic horses. Current treatments manage symptoms but do not slow the disease itself. This study investigates the potential of mesenchymal stromal cells (MSCs) to treat joint inflammation in high-motion joints (fetlock or carpus) and provide longer-lasting benefits than current options. We are comparing the effectiveness of injecting either 5 million or 10 million MSCs directly into affected joints to a popular equine biological product, APS. The goal is to determine if MSCs can better relieve OA signs in horses with naturally occurring OA.

#### McCarrel, T. - Development of an intraluminal arytenoid abduction device (ILAD)

Recurrent laryngeal neuropathy (commonly called "roaring") is one of the most common performance limiting diseases of the upper airway in large breed horses such as Thoroughbreds, Standardbreds, and warmbloods. The long-standing gold standard surgical treatment to improve performance in affected horses is the tie-back procedure. The tie-back requires an open surgical approach to place sutures to hold the left arytenoid cartilage in an open position called abduction. Among the most common complications of the surgery are inadequate abduction and chronic cough. Uncommon but more serious complications can include abnormal swallowing leading to lower airway contamination and reflux of saliva from the esophagus.

The use of image-guidance during surgery is becoming more common and has been shown to improve surgical accuracy, reduce post-operative morbidity, and improve outcomes in people and veterinary species. We are working towards developing a new surgical procedure that will involve placing a screw to fix the left arytenoid in an abducted position under computed tomographic (CT)-guidance through a small incision similar in size to what is typical for routine arthroscopic surgeries. It is hoped that this approach will provide more accurate implant placement with less disruption of the critical muscles and nerves of the larynx.

The focus of the current project is to develop an intraluminal abduction device (ILAD) to be able to precisely abduct the arytenoid into the desired position as confirmed on CT prior to surgery. The device would be placed into the larynx through the mouth similar to how we routinely place endotracheal tubes for horses under anesthesia. In order to develop the ILAD, we will CT larynges from numerous horses to model the shape of the lumen of the airway when the arytenoid cartilages are abducted. We will then produce models to fit various sizes of larynges and then insert the ILADs back into larynges to confirm the desired degree of abduction has been achieved on CT.

# Merkies, K. and Riley, C. - Exploring the effects of equine behaviour education on equestrian behaviour and lesson horse welfare

Riding lesson facilities provide an important service in educating people about horses, shaping their understanding of horse behaviour and acceptable riding practices. However, the welfare of lesson horses is a concern as they often require more veterinary care and display more depressive or pessimistic attitudes compared to other horses. While evidence-based training methods can improve horse welfare, many equestrians are unaware of how their riding practices impact the welfare of their horse(s), and when compounded with a lack of education, often contribute to horse welfare issues.

To understand how riders perceive the emotional state of their horse, this ambitious study of 64 riders will measure the effect of a 12-week educational (Equine Guelph online course), and/or self-reflection program on rider behaviour during lessons and whether this impacts welfaresensitive aspects of behaviour and physiology in ridden horses. A qualitative component will explore rider attitudes, perspectives and experiences. A repeated standardized ridden test will be performed by participating riders (n=64) three times throughout the study period to measure rider behaviour and emotion-relevant equine responses. The ridden test will be conducted at the start of the study period for baseline measurements and immediately before and after the 12-week intervention to examine potential changes in rider behaviours that are associated with changes in horse responses. At the same three time points, qualitative interviews will be conducted with each participating rider to understand their attitudes and beliefs about their training and riding practices. their experiences with participating in the educational program(s) and to develop potential solutions for future behavioural change research endeavors. Qualitative interviews will also be conducted with the riding coach at the start and end of the study to explore their beliefs and attitudes toward training and coaching, how they cultivate their riding school culture, and their perception of changes in their riders after the intervention to co-construct coaching/training practices that align with horse well-being.

More research is needed on how interventions like self-reflection and education can improve interactions between equestrians and horses. Understanding these factors is essential for developing initiatives that encourage positive behavioural changes among equestrians that ultimately improve the welfare of lesson horses.

# Physick-Sheard, P. and Pyle, G. - Factors associated with cardiac arrhythmia in Standardbred racehorses

Previous research has shown that during and immediately after racing, horses can develop potentially fatal heart rhythm disturbances. These disturbances were associated with events that could reflect changes in the horse's flight-or-fight system. In humans, emotional events can cause cardiac rhythm disturbances and in horses it is known that management can have substantial impacts on a horse's health. Sudden death is incredibly dangerous for riders, jockeys, and drivers, and jeopardizes the future use of horses in sport by decreasing public support.

Analysis of variability and rhythm in the ECG can provide insights into emotional state. We hypothesize that analysis of heart tracings (ECGs) collected from Standardbred horses before, during and after live racing can reveal evidence of stressful events. Features of the ECG will be examined to identify significant relationships with possible external sources of stress, such as late track arrival time relative to race time, duration and intensity of warmups, horse's experience level, and track footing.

All ECGs to be investigated in this study have been previously analyzed, and findings published. Severe rhythm disturbances were identified in 18% of the horses. Further analysis creates an opportunity to study potential heart rhythm risk factors. Our aim is to better understand stress-associated cardiac rhythm changes and, having confirmed the association, to highlight possible modifications to routine procedures that could decrease impacts and the risk of cardiac events, thus reducing fatalities and increasing safety.

#### **Continuing Projects:**

#### Arroyo, L. - Improving Methods for Detection of Intestinal Dysbiosis in Horses

Intestinal diseases are the leading cause of mortality in horses and are normally associated with microbiota changes before and during the outset of diseases or treatment with antibiotics. DNA sequencing (NGS) has been used to characterize changes in the microbiota of horses, but those technologies are relatively expensive, have a long turnaround time and require complex bioinformatic analyses. In addition, a major limitation of those techniques is the lack of absolute quantification, meaning that it is impossible to know how many bacteria were present in the feces. Recently, we have used quantitative methods to show that there were markedly lower amounts of bacteria in the feces of horses with colitis compared to healthy animals. In addition, we were able to find some bacteria that were statistically more abundant in horses that were euthanized compared to horses that survived. The objective of this study is to expand the markers that were found to be good indicators of microbial imbalances in horses with colitis. In the present study, we will conduct a multicenter study to determine if the dysbiosis present in horses with colic can be used to distinguish the type of colic and measure severity.

# Arroyo, L. - Pulse Wave Velocity in Equine Palmar Digital Arteries and Laminitis: A Pilot Study

Laminitis is a common crippling condition in horses, causing relevant losses in the equine industry. To date, the mechanisms of the disease have not been fully understood. With increased arterial stiffness of elastic arteries and changes in the vascular tone of the peripheral muscular arteries, the distal capillary beds may be exposed to increased mechanical stimulus by faster and more pulsatile blood flow. In humans, arterial stiffness appears to play a significant role in cardiovascular diseases, brain and kidney injury, by causing microvascular damage in these organs. The microvascular changes observed in laminitis are comparable to those observed in the brain and kidney lesions of humans with increased arterial stiffness and reported changes in hemodynamic in laminitic horses are also compatible with increased arterial stiffness of central arteries and vasodilation of peripheral muscular arteries. More, two of the main triggers of laminitis are known to affect arterial stiffness in humans (systemic inflammation and hyperinsulinemia). Pulse wave velocity (PWV) is a good indicator of arterial stiffness and should be measurable on equine distal limbs. There are many unanswered questions about laminitis, but the study of pulse wave velocity in the equine distal limb has the potential to deepen our knowledge regarding its pathogenesis and point out new targets for treatment of this condition. Thus, palmar digital artery PWV in horses appears as a new and extremely relevant topic waiting to be investigated.

# Arroyo, L. - The longitudinal development of the fecal microbiome and metabolome in neonatal foals

Neonatal diarrhea is a common occurrence in foals that can develop into a life-threatening condition. However, at present the etiology is poorly understood and it is unclear why diarrhea progresses in some foals whereas others recover without additional symptoms. The microbial environment within the neonatal gut rapidly becomes colonized following birth. However, several factors influence the particular microbes that are present such as location, maternal diet, and even breed, making comparisons between individuals challenging. Therefore, the metabolic activity of gut microbes may provide a more analogous comparison and improve our understanding of bacterial function at this critical stage of gastrointestinal development. Integrating both microbial and metabolic data will enable a comprehensive understanding of how the gut environment matures in horses and what key aspects denote health. This research will also begin to reveal potential deviations from health that occur during critical bouts of diarrhea in foals. Understanding the gut microbial development in foals will advance the field of equine neonatal care and move it towards personalized treatments and therapeutics.

# Arroyo, L. - Improving fecal transplantation in horses: determining optimal conditions for preparation & storage

The development of new DNA sequencing technologies has revealed that the interaction between intestinal bacteria and the host is extremely important to health maintenance. In fact, an altered composition of the intestinal bacteria (called dysbiosis) is present in horses with intestinal diseases such as colitis and colic and during treatment with antimicrobial drugs. The correction of dysbiosis to decrease inflammation and to resolve diarrhea faster. Different methods can be attempted to resolve dysbiosis including probiotics, supplements, or fecal microbiota transplantation (FMT), which is the transferring of all microorganisms and metabolites present in the feces of a healthy donor to a sick patient. FMT has been used with great success in humans and dogs, resolving over 95% of cases of diarrhea in people with Clostridioides difficile infection, which is also a leading cause of diarrhea in horses. FMT has been given to horses with diarrhea, but so far, scientific evidence indicates that FMT is not so efficient in horses. Our preliminary data show that the current recommendations of FMT to correct dysbiosis in horses has no evident impact on the microbiota of horses. This might be related to the fact that FMT cannot be given by enema, as in other species, because of the horse's anatomy and the administration via nasogastric tube drastically decreases the viability of the transferred bacteria. Furthermore, it has been shown that over 80% of the bacteria present in feces die during FMT preparation because of exposure to Oxygen and freezing. Therefore, increasing bacterial viability in the transplanted solution is fundamental to improve FMT efficacy in horses. The objectives of this study are to optimize bacterial viability of FMT using anaerobic conditions and to identify microbiota patterns associated with higher resistance to storage.

### Arroyo, L. - Screening for biomarkers indicators of intestinal health among the equine microbiota

Intestinal diseases are the leading cause of mortality in horses. Recently, the intestinal microbiota has been shown to be essential to the health of the host. Marked changes in the intestinal microbiota (dysbiosis) are present before and during the outset of diseases and after treatment with antibiotics. New technologies such as next generation DNA sequencing (NGS) are reliable to characterize changes in the microbiota, but are relatively expensive, have a long turnaround time and require complex bioinformatic analyses. Specific bacterial markers are currently being used in other species to accurately predict intestinal dysbiosis. For example, increased Enterobacteriaceae and the decreased Lachnospiraceae are constantly observed along with intestinal inflammation. This study will find and validate key bacteria that could be measured by real time PCR (qPCR), which is quicker and cheaper than DNA sequencing. The objective is to identify potential markers of intestinal dysbiosis to be used as an alternative to DNA sequencing to detect dysbiosis in horses, allowing early treatment and closer monitoring of those animals.

#### Avison, A. - Equine Myocardial Ion Channel Expression

Since their domestication, horses have been selected for their athletic ability. However, Thoroughbred racehorses have been estimated to have up to 260 times greater risk of sudden athletic death than human athletes. Additionally, non-fatal heart rhythm disturbances or "arrhythmias" are common in racehorses. It is estimated that at least 20% of equine sudden athletic deaths may be the result of rhythm disturbances that proved fatal. The reason horses are susceptible to these arrhythmias is not known. In order to advance our understanding of cardiac contributions to sudden athletic death, we require a greater understanding of the normal heart electrical activity in horses. As such, we aim to investigate specific proteins that are essential to the heart's electrical activity in horses, which has never been done before, and is an essential step to understanding potential predispositions to dangerous heart rhythm disturbances. The overall goals of this project are to identify markers of cardiac dysfunction in performance horses,

identify those horses most at risk for sudden cardiac death, and reduce the risk of morbidity and mortality of equine athletes.

#### Avison, A. - Cardiac dysfunction and sudden death in horses

Fatality among equine athletes is a rapidly growing concern with respect to animal welfare, ethical considerations, human safety, and public perception of equine sports. Emerging evidence by our group supports cardiovascular disease —specifically cardiac arrhythmias and conduction disturbances —as a significant and under-recognized factor. The contribution of arrhythmias to racehorse fatalities is difficult to quantify and is often a presumptive diagnosis of exclusion owing to the inability to assess cardiac function after death. In addition to concerns regarding fatalities, there is ongoing public and industry unease about exercise-induced pulmonary hemorrhage (EIPH) and the use of race-day medication (Lasix ®, furosemide). It is widely accepted that nonfatal arrhythmias are often identified during exercise or in the immediate post-exercise period inapparently normal equine athletes. However, their frequent detection does not negate their possible significance. Small or transient increases in pulmonary vascular pressure due to such rhythm disturbances may be the underlying cause or a contributor to EIPH in many horses. Therefore, the overall contribution of cardiac dysfunction to equine mortality remains unknown.

# Beeler-Marfisi, J. - The relationship between EIPH and exposure to ambient air pollution in Thoroughbred and Standardbred racehorses

Worldwide, the prevalence of exercise induced pulmonary hemorrhage (EIPH) is estimated between 44% to 85% of Thoroughbred (TB), and up to 87% in Standardbreds (SB) racehorses. The condition is important to Ontario racing because affected horses are suspected to have shortened racing careers, and in rare instances, may suffer sudden death from massive hemorrhage. EIPH is caused by stress failure of capillaries in the caudodorsal lung, secondary to repeated high-intensity work. However, Veterinarians who regularly assess racehorses by tracheobronchoscopy at Woodbine and Woodbine-Mohawk Park (Mohawk) racetracks in Ontario, Canada are concerned that their proximity, respectively, to Lester B. Pearson Airport and a major highway is exposing racehorses to excessive air pollution, which might contribute to development of EIPH. Two previous studies showed a relationship with EIPH and cooler temperature, but studies on air pollution and EIPH are lacking. The provincial and federal governments have air quality monitoring stations and weather stations located close to Woodbine and Mohawk. These collect air pollution data including nitrogen dioxide (NO2), ozone (O3) fine particulate matter less than 2.5 microns in diameter (PM2.5), and temperature data.

# Beeler-Marfisi, J. - Identification of putative exercise-induced pulmonary hemorrhage causing variants in Ontario's Thoroughbred racehorses

Exercise-induced pulmonary hemorrhage (EIPH) is a common disease affecting up to 80% of training and racing Thoroughbreds (TBs). EIPH refers to bleeding within the lung during exercise and is diagnosed by visualizing blood in the trachea by endoscopic examination after work. The disease is caused by stress failure of the lung's capillaries during intense exercise from increased capillary pressures in what should otherwise be a low-pressure organ. Additionally, for unknown reasons, severely affected horses can suffer fatal bleeding into the lungs during high-intensity work. In 2001, the Alcohol and Gaming Commission of Ontario, developed the Equine Incidences in Ontario Racing program, and mandated that any horse dying during or within 60 days of a race must undergo post-mortem examination. From 2003-2015, pulmonary hemorrhage and EIPH were determined as the cause of death in 76% of all sudden death cases, representing 37% of all sudden deaths in TB racehorses. Therefore, the disease is important to the racing industry not only as a cause of poor performance but also for its negative impact on the health and welfare of the horse, and the distress it causes to the general public and the people involved with the affected animal. Genetics were shown to have a moderate to high role in determining whether a TB will

develop EIPH. As such, there may be genetic markers, or variants, within the TB genome that are associated with the development of EIPH. These variants could be used to identify horses at high risk of developing EIPH or fatal EIPH; however, these variants have yet to be discovered. In this study, we will identify genetic markers of EIPH using whole-genome sequencing of DNA from TBs with fatal EIPH. Our long-term goal is to identify and verify these EIPH-causing variants, with the aim of developing a genetic test, which could be used to inform breeding and training decisions in genetically predisposed TBs

# Beeler-Marfisi, J. - Macrophage responses of healthy and severely asthmatic horses to agents that exacerbate equine asthma

Severe equine asthma (SEA) is the most common non-infectious inflammatory airway disease of mature horses. This disease causes decreased athletic ability and with progression may lead to euthanasia. Severe equine asthma is caused by exposure to airborne dusts found in the barn, including fungal spores, LPS and inorganic particulates, such as silica from soil (challenge material, Beeler-Marfisi et al. 2010). Although studied for decades, it remains unclear why some horses develop SEA while others with the same dust exposure do not. Alveolar macrophages (AMs) are the first line of defense in the lung and during inflammation, are supplemented by monocyte-derived macrophages (MDMs). Broadly speaking, AMs and MDMs are classified as pro-or anti-inflammatory based on expression of cell surface markers including CD163 and CD206, as well as patterns of protein production. In previous work comparing healthy and SEA-affected horses (Kang et al. 2021), we noted that AMs from asthmatic horses had a different immunophenotype to healthy horses suggesting a relationship between this altered immunophenotype and lung inflammation. Therefore, we believe that differences exist in AM and MDM immunophenotype and other cellular responses between healthy and SEA-affected horses which will explain why some horses become asthmatic while others do not.

### Changoor, A. & Koenig, J. - Portable Electroarthrography & Biomechanical Measurement System to Evaluate Equine Cartilage Quality at the Point-of-Care

Osteoarthritis (OA) is the most common cause of lameness in horses and is characterized by progressive and irreversible cartilage degradation. Cartilage is the thin tissue that lines the ends of bones in joints and normally enables pain free movement. Early recognition of OA is important to be able to treat and potentially prevent disease progression, yet veterinarians have no easy way of identifying cartilage changes and objectively monitoring joint disease. Electroarthrography (EAG) is an innovative technology that evaluates cartilage through sensors placed on skin around a joint, such as the equine fetlock (metacarpophalangeal) joint. This is similar to the way heart health can be understood using electrocardiography. EAG, measured with a prototype measurement system, successfully followed OA progression and treatment in an equine fetlock model of early OA. The prototype EAG-based measurement system used in this recent clinical study was critically evaluated to identify areas for performance improvement. The proposed research aims to create a reliable, accurate and portable EAG-based measurement system for evaluating cartilage quality at the point-of-care. We hypothesize that such a system can be created by combining existing sensor technologies in a unique way to measure both EAG and biomechanics simultaneously in real-world situations and that the system can be successfully validated against a gold-standard. This research is expected to produce a robust EAG based measurement system that can be used by equine veterinarians to evaluate cartilage health in real time. Achieving the study aims would provide a critical link to further develop EAG into a sensitive diagnostic method and dramatically improve how OA is managed in horses.

# Changoor, A. & Koenig, J. - Evaluation of Non-invasive Electroarthrography to Predict Cartilage Quality in Equine Osteoarthritis

Osteoarthritis (OA) is the most common cause of lameness in horses and is characterized by progressive and irreversible cartilage degradation. Cartilage is the thin tissue that lines the ends of bones in joints and normally enables pain free movement. Early recognition of OA is important to be able to treat and potentially prevent disease progression. Veterinarians could benefit from having a way of identifying cartilage changes that would allow them to objectively monitor OA. Electroarthrography (EAG) is an innovative technology that evaluates cartilage through sensors placed on skin around a joint, such as the equine fetlock. This is similar to the way heart health can be understood using electrocardiography. The proposed research aims to improve EAG collection to make it easier to use in the clinic, as well as evaluate the ability of EAG to follow OA progression and treatment in an equine fetlock (metacarpophalangeal) model of early OA. We hypothesize that we can streamline EAG collection by creating a read-to-wear device and that EAG will be able to detect cartilage changes over time and show a relationship to magnetic resonance imaging (MRI) and direct observations of cartilage quality using arthroscopy. This research will be the first to demonstrate that non-invasive EAG can be used in a clinical setting to monitor cartilage health, and we anticipate EAG will produce comparable results to MRI. Achieving the study aims would provide a critical link to further develop EAG into a sensitive diagnostic method that could be deployed at the point-of-care and dramatically improve how OA is assessed and treated in horses.

# Chenier, T. - Efficacy of an Oral Supplement Containing Omega Fatty Acids for Treatment of Persistent Breeding-Induced Endometritis (PBIE) in Mares.

The health of the breeding industry is critical to the overall success of the horse industry. Reproductive efficiency in horses is generally low, for a variety of reasons, including infertility caused by uterine disease. Endometritis is the third most common medical condition encountered overall in equine veterinary practice (Traub-Dargatz et al. 1991), and approximately 60% of mares affected by endometritis are barren (Overbeck et al. 2011). Causes of endometritis include acute bacterial infections, chronic infections, and persistent breeding-induced inflammation (PBIE). PBIE is characterized by a prolonged inflammatory response following breeding, leading to early embryonic loss and infertility. A normal, transient inflammatory response occurs post-breeding; however, in a subset of susceptible mares, this inflammation persists. One study identified PBIE in 43% of a mixed population of mares and found a lower pregnancy rate in affected mares compared to normal mares (49% versus 62%; Newcombe 1997). Given the large number of horses in the breeding sector both in Ontario and Canada as a whole, endometritis and more specifically PBIE, causes a significant economic impact to both the Canadian and Ontario breeding industries. Cytokines are proteins produced by cells that have an effect on the immune system to fight disease. The uterine inflammatory response can be characterized by alterations in these cytokines. Levels of both pro-inflammatory and anti-inflammatory cytokines are different between PBIE-susceptible versus normal mares. This study will compare uterine lavage, uterine infusion of platelet-rich plasma and oral supplementation with Omega-3 fatty acids, as treatments in mares with PBIE. Levels of several inflammatory proteins (cytokines) in the uterus will be evaluated, and clinical signs of endometritis will be assessed. The benefits of this study include potential identification of a new, effective therapy for PBIE in mares, resulting in reduced antibiotic use, improved fertility and improved understanding of this important condition.

# Cote, N. - Evaluation of factors contributing to upper airway obstruction through repeated resting and dynamic respiratory endoscopies in 2-year-old Standardbreds

Identification of upper airway abnormalities at the beginning of a racing career may predict future airway obstruction and therefore the productive performance of the horse. It has been demonstrated that endoscopy at rest is not a sufficient means of evaluating underlying upper airway pathology. Therefore, a combination of resting and dynamic endoscopies is recommended to fully evaluate the upper respiratory system. It is well described in the literature that

abnormalities found during post-sale endoscopies are negative predictors for future racing performance (e.g., lower earnings). Currently, it is unknown the number of yearlings racehorses that develop upper airway problems during their careers despite normal resting and dynamic endoscopic evaluation post-sale. Proposed predisposing factors for the development of upper airway disease include viral infection, pharyngeal lymphoid hyperplasia (PLH), lower airway inflammation (LAI), and exercise-induced pulmonary hemorrhage (EIPH). However, contradictory results have been reported in the literature and currently it is unknown what the contributing factors are in these individuals for the development of upper airway problems. A prospective longitudinal cohort study is needed to evaluate the number of horses that develop upper airway diseases and the contributing factors on the development of those diseases. Performing periodic resting and dynamic endoscopies may predict the development of upper airway disease and help identify factors that may play a role in their development. Furthermore, changes to the appearance of the upper airway in these young racehorses may occur under the influence of exercise and as they mature.

#### Gomez, D. - Hypotonic versus isotonic maintenance fluids in critically ill foals

Critically ill foals often receive maintenance intravenous fluids (IVFs) to correct and maintain normal hydration once the initial fluid resuscitation therapy has finished. Historically, administration of low-sodium (hypotonic) fluids as opposed to fluids with sodium concentration similar to those in the blood (isotonic fluids) was recommended. This practice was extrapolated from guidelines developed for healthy children in 1950s. However, this recommendation has recently been questioned in human medicine because some children can develop life-threating low blood sodium levels. Thus, the use of isotonic fluids has increased for maintenance of hydration in ill children while the use of hypotonic fluids declined. Despite this, the current veterinary literature continues recommending hypotonic solution for maintenance IVFs in sick foals. This approach can be adequate in some cases because anecdotal reports suggest that administration of isotonic fluids to foals could lead to complications such as high levels of sodium in blood, fluid accumulation in the body, and increased blood pressure. However, these recommendations lack of evidence-based support. The objective of this study is to compare the effect of isotonic versus hypotonic maintenance fluid therapy on blood sodium concentrations, cardiovascular variables, sodium-regulating hormones, and urine production in critically ill foals. Results of this study are expected to provide data to support evidence-based protocols and the development of guidelines for fluid therapy in critically ill foals.

# Gomez, D. - Enteroinsular axis in healthy horses and horses with gastrointestinal diseases during hospitalization

Endotoxemia are conditions where bacteria and their products gain access to the blood and set up widespread infections, often leading to death. Consequences of sepsis and endotoxemia include organ failure, loss of hormonal control, and metabolic/electrolyte derangements, including high glucose (hyperglycemia). These abnormalities are linked to severity of illness and death. Recent research has shown that hormones from the intestine (known as incretins) are important to control glucose levels and the ability of the pancreas to produce insulin. However, there is no information on the incretins in horses with gastrointestinal disease. The goal of this study is to investigate incretins (GLP-1, GLP-2, GIP) and insulin in healthy horses and horses with colic and diarrhea and determine their association with clinical findings, severity of disease, and likelihood of mortality. This information will have clinical implications in the diagnosis, treatment, and prognosis of critically ill horses.

# Gomez, D. - Fecal and serum metabolome and fecal bile acids and D-lactate concentrations in healthy horses and horses with colitis.

Colitis (inflammation of the colon resulting in diarrhea) is a serious disease in horses with high rates of morbidity and mortality. Infectious agents causative of colitis include bacteria, virus and parasites. Microbiological evaluations of feces from diarrheic horses revealed an association between some gut bacteria communities and the development of the diarrhea and the mortality of horses with colitis. However, the metabolites produced by bacteria during colitis are unknown as well their association with disease severity (i.e., mortality). Investigation of the metabolic-end products of bacterial activity will help to elucidate the significance of gut bacteria communities during inflammation of the gut. Therefore, the aim of this study is to examine the fecal and serum metabolites and fecal bile acids concentrations of healthy horses and horses with colitis. This research will combine several microbial and metabolic parameters to uncover the complex relationships between bacteria and gut inflammation in diarrheic horses especially in those that succumb to disease. The discovery of these novel relationships will enable the progress of targeted and individualized animal health care to improve disease prognosis and welfare.

# Gomez, D. - Cardiovascular effects of rapid and slow intravenous administration of sodium penicillin in horses undergoing exploratory laparotomy for colic: A randomized clinical trial.

Perioperative antimicrobial prophylaxis is recommended in horses with colic that undergo abdominal corrective surgery. Current recommendations include administering antimicrobials drugs within 60 min before surgery and readminister time-dependent antimicrobial drugs, such as sodium penicillin, every 60 minutes after the first dose if the surgery is still ongoing. However, compliance with re-administration is usually not followed because intravenous administration of sodium penicillin in anesthetized horses is associated with a decrease in arterial blood pressure, often already present in compromised colic horses, and can result in multiple systemic complications, including death. In healthy anesthetized horses, the decrease in arterial blood pressure caused by sodium penicillin administration is usually transient and of less clinical impact, although its severity is thought to depend on the speed of administration. The effect of sodium penicillin and the speed of administration on arterial blood pressure in horses with compromised cardiorespiratory function, such as colic, have not been investigated. Thus, the benefit of proper antimicrobial treatment has been outweighed by the risk of affecting cardiovascular function, without a proper assessment of this situation in a clinical scenario. The objective of this study is to compare the cardiovascular effects of rapid versus slow intravenous intraoperative administration of sodium penicillin in horses undergoing exploratory laparotomy for colic.

#### Koch, T. - Enhancement of Immune-Modulatory Properties of eCB-MSCs

Horses are multi-use livestock that contribute more than \$19 billion annually to the Canadian economy. Joint inflammation due to osteoarthritis or injury is among the most common causes of lost training days or premature retirement in equine athletes. Stem cells hold the promise of novel therapeutic approaches to these difficult-to-treat problems. Mesenchymal stromal cells (MSCs) can be expanded in culture to achieve the desired number for treatment and are capable of modulating cells of the immune system even after long-term storage, which makes them desirable for treatment of immune and inflammatory disorders. We expect that equine cord blood-derived (CB-) MSCs can be enhanced to have improved anti-inflammatory and immunomodulatory properties for future use as treatment of a variety of inflammatory or immune related disorders in horses. Our sole objective of this study is to determine possible in vitro enhancement of equine CB-MSCs using a novel proprietary culture engineering method to improve these immunomodulatory properties. The work will generate pivotal data to support the clinical evaluation of enhanced allogenic equine CBMSCs to treat joint inflammation in research horses. Upon proving the concept in research horses with induced inflammation, the enhanced equine CB-MSC would be tested in a randomized clinical trial for the treatment of joint inflammation in client-owned horses suffering from osteoarthritis. Fully implemented, this therapy would provide

a safe, efficacious, and technically simple treatment for selected inflammatory or immune-related disorders in horses.

Koch, T. - Assessment of Safety and Potential of antisense miRNA-181 to treat fetlock OA Osteoarthritis (OA) of the fetlock joint is a major equine welfare problem across breeds and disciplines leading to loss of training days, pre-mature retirement, or reduced performance. No therapies exist that delay progression of fetlock OA. MicroRNAs are small molecules that control gene expression; increased microRNA levels reduce expression of selected proteins. MicroRNA number 181 has been shown to be overexpressed in human facet joint OA. Injection of microRNA 181 into lab animal joints resulted in joint disease suggesting a critical role of microRNA 181 in joint health. Moreover, injection of antisense miR-181, which binds to and inactivates the effect of microRNA 181 in mice and rat models of joint disease, prevented the expected joint damage. This suggests that antisense miR-181 may be a useful therapy to treat OA. We hypothesize that injection of antisense miR-181 into equine fetlock joints is safe and associated with reduced joint inflammation and pain. Our objectives are: 1) To determine the safety of antisensemiR-181 in normal equine fetlock joints 2) To determine the safety, anti-inflammatory properties and analgesic effects of antisense-miR-181 in fetlock joints with documented OA and pain. 3) To determine if antisense miR-181 injected into the fetlock joint is detectable in the bloodstream. We expect that multiple injections of antisense miR-181 will not be associated with significant adverse reactions in normal or OA fetlock joints. We expect that multiple injections of antisense miR-181 will lead to a reduction of miR-181 concentrations within the fetlock joint, reduced lameness, and reduced joint inflammation.

#### Koch, T. - Mesenchymal stromal cells for the treatment of equine tendonitis

Tendon and ligament injuries are common in the equine athlete. These types of soft tissue injuries result in significant economic loss to the equine industry each year as a result of decreased performance prolonged rehabilitation, and recurrent injury. Even though tendons do heal with rest, the fibroelastic scar tissue formed is functionally deficient in comparison to more flexible tissue of normal tendons. The result is compromised performance of the horse and high re-injury rates. Currently, tendon injuries are treated in numerous ways including simple lay-off and rest, controlled rehabilitation exercise programs, shock-wave therapy, and biologics such platelet rich plasma and so-called stem cell therapies to name the most common therapies. This range of treatments reflects that no treatment has proven superior, and that adequate tendon repair remains an unmet clinical need. Culture expanded mesenchymal stromal cells (MSC) have shown promise in reducing the re-injury rate in horses suffering from tendonitis. Improved MSC efficacy may be achieved by extending the dwell time of the cells within the tendon tissue. This has the prospect of healing more horses and extending the careers of more horses suffering from tendon injuries. Improved MSC efficacy may be achieved by extending the dwell-time of the cells within the tendon tissue. Hyaluronic acid (HA) is used to extend dwell-time of cells within synovial joints. This increased dwell-time is expected to be associated with increased inflammatory modulation within the tissue and improved tissue healing.

# Koenig, J. - Can 10 or 20 Million Umbilical Cord Blood-Derived Mesenchymal Stromal Cells Treat Equine Fetlock Synovitis Effectively?

Osteoarthritis (OA) is a condition in horses where the joints undergo changes that affect their structure and function. It's a common reason for lameness and reduced performance in athletic horses. While there are treatments available to manage OA symptoms, none of them directly targets the underlying disease process. We're looking at using mesenchymal stromal cells (MSCs) to treat joint inflammation, known as synovitis, in horses' fetlock or carpus joints. MSCs are thought to have longer-lasting effects than corticosteroids, another type of treatment commonly used to treat OA. In our study, we want to see if injecting either 10 million or 20 million

MSCs, along with hyaluronic acid (HA), can improve the clinical signs of synovitis in horses. We'll compare this with using HA alone to see which approach is more effective in treating naturally occurring synovitis in client-owned horses.

#### Koenig, J. - Mesenchymal stromal cells for the treatment of equine osteoarthritis

Mesenchymal Stromal Cells (MSC) has been shown to alleviate pain in mild to moderate osteoarthritis (OA) of the fetlock joint. To date, these cells have been from single donor animals which makes the therapeutic response less standardized. We hypothesize that equine umbilical cord blood (eCB) MSC are safe and effective in treating joint pain and inflammation in an injury-induced equine model compared to placebo treatment. Our objectives are: 1) To compare the clinical safety and efficacy of eCB-MSC with that of saline in an equine fetlock-chip model; 2) To compare joint response to treatment on a molecular level to gain insights into possible mode of action of the eCB-MSCs. These feasibility studies will be conducted in research horses, and the horses will be returned to the research herd upon completion of the study. We expect that the tested cell formulation will not trigger significant adverse reactions following multiple injections. These results will set the stage for testing in horses with lameness due to fetlock OA.

# Muñoz, A. - Near-infrared display of indocyanine green in intraoperative tissue blood flow and tissue perfusion of healthy equine small intestine under laparoscopic guidance

There is no objective method for intraoperative assessment and quantification of blood perfusion in the equine gastrointestinal tract. Quantitative evaluation of indocyanine green fluorescence during laparoscopic and laparotomy surgery will enhance the precision and accuracy of real-time intraoperative visualization of blood flow and perfusion in the small intestine of healthy horses. This pilot study will set the framework for further studies of colic surgery in the clinical setting.

#### Pearson, W. - New insights into immunomodulatory effects of Spirulina in vitro

Inflammation and its associated oxidative stress have complex, dualistic adaptive and maladaptive effects on exercise performance, exercise recovery, and acclimation to repeated exercise bouts (i.e., 'training effect'). When these dualistic roles are in balance, exercise-induced inflammation imparts a net benefit to the training effect; however, when it exceeds adaptive capacity of tissue, degenerative inflammatory conditions such as arthritis can result. Dietary ingredients with the potential to dampen inflammation may reduce the incidence of exercise-induced tissue damage and degenerative disease but may also interfere with exercise recovery and training effect. Spirulina (Arthrospira sp.) is a nutrient-dense feed supplement with the potential to support robust health and optimize exercise performance in horses. Beyond just classical nutrition, Spirulina has marked antioxidant, anti-inflammatory, and immunomodulatory activities in various inflammatory conditions, including the inflammatory condition of exercise. These effects have not been shown in horses, and equine-specific downstream effects of Spirulina on local (cartilage) and systemic adaptation to exercise stress is not known.

# Riley, C. - A Prospective Study of Antimicrobial Susceptibility and Multidrug Resistance in Bacteria Isolated from Diagnostic Samples from Foals in Ontario

Ontario is a major hub for horse breeding in Canada and North America, with Thoroughbred and Standardbred horses being a significant part of the industry. The success of the breeding and performance sector in Ontario depends on the survival, health, and growth of foals. Unfortunately, many neonatal foals are admitted to veterinary hospitals due to sepsis, a severe infection, and only 60 to 80% of them survive. This is a leading cause of death in young horses. The key to effectively treating these infections is to use antibiotics, but treatment often starts before the lab results are available. Therefore, it's essential to understand the likely bacteria causing the infection and their antibiotic resistance patterns. Adhering to guidelines for antibiotic use is recommended, but these guidelines should be adapted to the specific region (i.e., Ontario), as

antibiotic resistance patterns differ between regions and change over time. While some studies have looked at antibiotic resistance in Ontario's horses, none have focused on neonatal foals. Investigating antibiotic resistance in sick foals is crucial to improve their survival and prevent the spread of antibiotic resistance in Ontario's horse breeding operations. We believe that antibiotic resistance patterns in sick neonatal foals in Ontario are unique, and the rates of multidrug resistance are unknown compared to other regions. We aim to identify the species of bacteria causing infections in Ontario's foals under 30 days old by studying bacteria from diagnostic samples and determining the antibiotic susceptibility patterns and the extent of multidrug resistance in the isolates from these neonatal foals.

# Torrent, A. - Fecal Microbiota Transplantation in horses via Pelvic Flexure Enterotomy during Colic Surgery

Diarrhea is a common postoperative complication observed after colic surgery in horses. Diarrhea increases post-operative morbidity and is associated with abdominal pain, dehydration, electrolyte and acid-base disturbances, toxemia, sepsis, and increased risk of laminitis. Overall, represents a complication that affects the well-being of the horse, may endanger its life, prolongs hospitalization times, drains resources and increases the cost of treatment. Historically there has been limited evidence supporting the effectiveness of oral administration of microbiota from healthy donors in restoring the normal microbiota of the large intestine in horses with diarrhea. The digestive juices secreted in the stomach and small intestine, along with the fermentation processes occurring within the cecum, are the most likely cause of failure. There is conflicting evidence among studies. Recent research conducted by McKinney et al. in 2021 has endorsed the use of fecal microbiota transplant (FMT) to mitigate the severity of diarrhea in horses with colitis and enhance the diversity of the microbiome. The current research project aims to explore an alternative route of administration of microbiota in horses. Our hypothesis suggests that the direct introduction of fecal microbiota from healthy donors into the large intestine during colic surgery will be both effective and readily available to the intestine, resulting in a positive impact on the patient's microflora after surgery.

# Valverde, A. - Comparison of two intraoperative lidocaine constant rate infusions on cardiorespiratory function and quality of recovery in healthy isoflurane-anesthetized horses undergoing elective surgery

Delivery of general anesthesia using a combination of at least 1 injectable anesthetic drug during maintenance with inhalational anesthetics is nowadays very common in equine anesthesia and known as balanced anesthesia or partial intravenous anesthesia. Reduced doses of individual anesthetic drugs are possible with balanced anesthesia techniques because of synergistic or additive effects between the different drugs and often result in better analgesia and relaxation, less cardiorespiratory depression, and in horses may contribute to a better quality of recovery. Anesthetic mortality in horses is the highest among domestic species and recent studies show that most of the fatal outcomes occur in the postoperative period, including the recovery phase from anesthesia; therefore, the impact of intraoperative anesthetic drugs on the quality of recovery should be thoroughly considered. Lidocaine, routinely used intraoperatively in balanced techniques, has a sparing effect on the required concentration of inhalational anesthetic through analgesic and central nervous depression effects, which promotes a more stable cardiorespiratory function and a lighter plane of anesthesia. A negative association of lidocaine with the quality of recovery can outweigh these benefits by causing ataxia and visual dysfunction, especially if the infusion of lidocaine is not stopped for at least 30 minutes before the end of surgery, since plasma and tissue concentrations can be high at the time the horse attempts to recover and interfere with motor function and coordination. This study will investigate the feasibility of a higher rate of lidocaine and its effects during anesthesia and the recovery period.

#### zur Linden, A. - Equine Pulmonary Biopsy: Improving Safety and Efficacy

Percutaneous lung biopsy is a common method for obtaining diagnostic samples of lung tissue abnormalities in humans and other species. Due to blood vessels and airways that run throughout the lung tissue, complications can arise due to puncture of high flow structures during biopsy. Currently there has been no characterization of the detailed branching of either airways or blood vessels within the equine lung. Because anatomy differs between individuals, and anomalies of anatomy may occur, a preventative strategy will further increase safety of the procedure. Filling the biopsy tract with a material to reduce bleeding and air leakage, shows promising results but is not yet standard practice. By using data collected from dissection and multi detector computed tomography (MDCT) of cadaver horse lungs, we plan to elucidate the paths of major vessels and airways within the equine lung. Correlation of regions of minimal functional importance with external anatomical landmarks on adult equine cadavers will allow us to make recommendations on the safest locations for biopsy. These recommendations will be provided as landmarks easily identified by clinicians to improve the safety of the procedure in adult horses, which due to size. must be performed without imaging guidance. Development of a preventative step following biopsy will begin with testing gel foam embolization techniques for air and blood leakage in ventilated and perfused cadaver lungs. We hypothesize that greater anatomical knowledge, recommendations for biopsy locations, and preventative strategies will increase the safety and efficacy of blind percutaneous lung biopsy in horses.

### Appendix 6: Research Publications:

#### Dr. Luis Arroyo

Arroyo, Luis & Gomez, Diego & Moore, Alison & Papapetrou, Maria & Lillie, Brandon. (2024). Molecular testing for equine herpesviruses 1 (EHV-1) in healthy postpartum broodmares. The Canadian veterinary journal. La revue veterinaire canadienne. 65. 813-816.

Arantes, Julia & Pietro, Rebecca & Ratté, Mélanie & Arroyo, Luis & Leclere, Mathilde & Costa, Marcio. (2025). Changes in bacterial viability after preparation and storage of fecal microbiota transplantation solution using equine feces. PeerJ. 13. e18860. 10.7717/peerj.18860.

Gomez DE, Kopper JJ, Byrne DP, Renaud DL, Schoster A, Dunkel B, Arroyo LG, et al. Treatment approaches to horses with acute diarrhea admitted to referral institutions: A multicenter retrospective study. PLoS One. 2024 Nov 20;19(11): e0313783. doi: 10.1371/journal.pone.0313783. PMID: 39565809; PMCID: PMC11578493

#### Amanda Avison, DVM

Avison A, Goderre B, Pyle G, Physick-Sheard P. QT interval and cardiac restitution complexity in Standardbred racehorses from rest to maximal effort: Putative implications for arrhythmia risk. [Under Review] *Journal of Veterinary Internal Medicine*. Resubmitted May 13<sup>th</sup>, 2025. Manuscript ID JVIM-25- 162.R1.

Avison A, Physick-Sheard P, Pyle G. Performance horses as a model for exercise-associated cardiac arrhythmias and sudden cardiac death. *Journal of Molecular and Cellular Cardiology Plus*. 2025; 12: 100452. https://doi.org/10.1016/j.jmccpl.2025.100452.

#### Dr. Judith Koenig

Giraldo A, Koch TG, Madan P, Lepage S, Monteith G, Alizadeh AH, Tran A, Mortagy N, Koenig JB. Effect of extracorporeal shockwave therapy on the immunomodulatory and anti-inflammatory properties of cultured equine umbilical cord blood mesenchymal stromal cells. Can J Vet Res. 2024 Jul;88(3):87-93. PMID: 38988333; PMCID: PMC11235386.

Henderson ARP, Valverde A, Koenig J, Sears W. Effects of anesthetic protocol, procedure, and recovery stall and interval on the quality of recovery in repeatedly anesthetized horses. Can J Vet Res. 2025 Jan;89(1):17-25. PMID: 39744466; PMCID: PMC11665727.

Luque RM, Henderson B, McCorkell TC, Alizadeh AH, Russell KA, Koch TG, Koenig J. Treatment outcomes for equine osteoarthritis with mesenchymal stromal cells and hyaluronic acid. Equine Vet J. 2025 May 13. doi: 10.1111/evj.14531. Epub ahead of print. PMID: 40364589.

Electroarthrography Tracks Changes in Joint Health and Corresponds to Clinical Outcomes in an Equine Chip Model of Osteoarthritis (Paper in progress for publication in 2025) R.P. Suderman<sup>1</sup>, J. Pascual<sup>2</sup>, T.C. McCorkell<sup>3</sup>, R.M. Luque<sup>3</sup>, J.B. Koenig<sup>4</sup>, A. Changoor<sup>1,2,5</sup>

#### Dr. Thomas Koch

Luque RM, Henderson B, McCorkell TC, Alizadeh AH, Russell KA, Koch TG, Koenig J. Treatment outcomes for equine osteoarthritis with mesenchymal stromal cells and hyaluronic acid. Equine Vet J. 2025 May 13. doi: 10.1111/evj.14531. Online ahead of print. PMID: 40364589

Roberts EL, Lepage SIM, Koch TG, Kallos MS. Bioprocess development for cord blood mesenchymal stromal cells on microcarriers in Vertical-Wheel bioreactors. Biotechnol Bioeng. 2024 Jan;121(1):192-205. doi: 10.1002/bit.28557. Epub 2023 Sep 29. PMID: 37772415

Seabaugh K, Rao S, Koenig JB, Pezzanite L, Dow S, Koch TG, Russell KA, Mehrpouyan S, Alizadeh AH, Goodrich LR. A Pilot Study to Assess the Safety and Efficacy of Umbilical Cord Blood-Derived Mesenchymal Stromal Cells for the Treatment of Synovitis in Horses.

Animals (Basel). 2024 Nov 26;14(23):3406. doi: 10.3390/ani14233406. PMID: 39682372

Giraldo A, Koch TG, Madan P, Lepage S, Monteith G, Alizadeh AH, Tran A, Mortagy N, Koenig JB. Effect of extracorporeal shockwave therapy on the immunomodulatory and anti-inflammatory properties of cultured equine umbilical cord blood mesenchymal stromal cells. Can J Vet Res. 2024 Jul;88(3):87-93.

PMID: 38988333

Antunes J, Salcedo-Jiménez R, Lively S, Potla P, Coté N, Dubois MS, Koenig J, Kapoor M, LaMarre J, Koch TG. microRNAs are differentially expressed in equine plasma of horses with osteoarthritis and osteochondritis dissecans versus control horses. PLoS One. 2024 Feb 23;19(2): e0297303. doi: 10.1371/journal.pone.0297303. eCollection 2024. PMID: 38394252

#### Dr. Alexander Valverde

Henderson ARP, Valverde A, Marchiori J, Tisotti T, Torrent A, Côté N, Gomez D. Effect or rapid and slow intravenous administration of sodium penicillin on arterial blood pressure in isoflurane-anesthetized horses during surgery. Vet Anaesth Analg 2025; Mar-Apr;52(2):200–207. https://doi.org/10.1016/j.vaa.2025.01.001

Henderson ARP, Valverde A, Koenig J, Sears W. Effects of anesthetic protocol, procedure, recovery stall, and interval on the quality of recovery in repeatedly anesthetized horses. Can J Vet Res 2025 Jan;89(1):17-25. PMID: 39744466

Henderson ARP, Valverde A, Côté N, Sanchez A, Johnson R, Arroyo L. Comparison of two intraoperative lidocaine constant rate infusions (CRI) on cardiopulmonary function and quality of recovery in healthy horses maintained with isoflurane and a CRI of dexmedetomidine for arthroscopic surgery. Vet Anaesth Analg 2025, Jan-Feb;52(1): 124.e1e124.e14. https://doi.org/10.1016/j.vaa.2024.11.022

### **Appendix 7: Research Presentations**

#### Amanda Avison, DVM

Avison A\*, Goderre B, Pyle G, Physick-Sheard P. Cardiac restitution, ion channels, and racehorses: A spontaneous model of sudden cardiac death in athletes. *American Physiology Society Annual Summit.* April 2025. Baltimore, USA. [Scholander award finalist poster presentation & invited oral Trainee Highlights presentation].

Avison A\*, Goderre B, Pyle G, Physick-Sheard P. Cardiac restitution in Standardbred racehorses during routine racing exercise. *Canadian Emerging Veterinary Scholars Summit.* October 2024. Calgary, Canada.

• Invited national presentation and awarded first place for presentation.

Avison A\*, Goderre B, Pyle G, Physick-Sheard P. Electrocardiographic restitution in the racehorse through maximal intensity exercise and early recovery. *Ontario Veterinary College Graduate Student Symposium*. July 2024. Guelph, Ontario.

Awarded first place out of over 20 oral presentations.

Avison A, Physick-Sheard P\*, Pyle G. Biomarkers of electrophysiologic function in the equine heart. *International Federation of Horseracing Authorities Global Summit on Equine Safety and Technology.* June 2024. Woodbine Racetrack, Toronto, Ontario.

Avison A, Goderre B, Pyle G, Physick-Sheard P\*. ECG restitution parameters in racehorses developing post-race rhythm disturbances. *International Federation of Horseracing Authorities Global Summit on Equine Safety and Technology.* June 2024. Woodbine Racetrack, Toronto, Ontario.

#### Dr. Janet Beeler-Marfisi

Regional Respirology Rounds – Horses as a Model for Human Neutrophilic Asthma. St. Joseph's Healthcare and McMaster University. 1h. December 17, 2024.

Quarter Racing Owners of Ontario – Board Meeting – brief discussion on my research, air pollution's effects on equine lungs, mild equine asthma and bleeding. Picov Downs. April 13, 2024

#### Dr. Adele Changoor & Dr. Judith Koenig

Suderman RP, Lui J, McCorkell TC, Munevar Luque R, Koenig J, Changoor A. Effects of acute synovitis on electroarthrography in an equine lipopolysaccharide model (Poster Presentation). 71<sup>st</sup> Annual Meeting of the Orthopaedic Research Society, Vol. 50:417, Phoenix, Arizona, USA, February 7-11, 2025.

Lui J, Suderman RP, Akens MK, Grynpas MD, Koenig J, Changoor A. The influence of centre-of-pressure on electroarthrography, a non-invasive method to assess cartilage quality (Poster

Presentation). 71<sup>st</sup> Annual Meeting of the Orthopaedic Research Society, Vol. 50:411, Phoenix, Arizona, USA, February 7-11, 2025.

Suderman RP, Lui J, Naguib H, Grynpas MD, Changoor A. Distribution of electroarthrography signals on skin around the equine fetlock joint for the diagnosis of degenerative joint diseases (Poster Presentation). American Society for Bone and Mineral Research Annual Meeting, Toronto, Ontario, Canada, September 27-30, 2024.

Suderman RP, Pascual J, Munevar Luque R, Grynpas MD, Naguib H, Koenig J, Changoor A. Non-invasive electroarthrography follows progression of early osteoarthritis in an equine chip model and corresponds to clinical outcomes (Poster Presentation). Canadian Orthopaedic Research Society Meeting, Halifax, Nova Scotia, Canada, June 12-15, 2024.

Lui J, Suderman RP, Munevar Luque R, Grynpas MD, Naguib H, Koenig J, Changoor A. The relationship between centre-of-pressure and electroarthrography, a non-invasive method for cartilage assessment (Poster Presentation). 28<sup>th</sup> Annual Canadian Connective Tissue Conference, London, Ontario, Canada, May 13-15, 2024.

Suderman RP, Munevar Luque R, Grynpas MD, Naguib H, Koenig J, Changoor A. Non-Invasive electroarthrography to monitor cartilage in an equine model of early osteoarthritis (Podium Presentation). 28<sup>th</sup> Annual Canadian Connective Tissue Conference, London, Ontario, Canada, May 13-15, 2024.

Suderman RP, Pascual J, Munevar Luque R, Grynpas MD, Naguib H, Koenig J, Changoor A. Non-invasive electroarthrography and centre-of-pressure measurements track progression in an equine chip model of early osteoarthritis (Poster Presentation). 70<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, Vol. 49:563, Long Beach, California, USA, February 2-6, 2024.

Suderman RP, Naguib, H, Grynpas MD, Changoor A. Non-invasive Electroarthrography prototype with re-usable carbon fiber fabric electrodes. (Podium Presentation). 27<sup>th</sup> Annual Canadian Connective Tissue Conference, Toronto, Ontario, Canada, June 14-16, 2023.

#### Dr. Katrina Merkies

May 8th, 2024 - CCSAW Symposium, Guelph, ON. Oral presentation by Caleigh Copelin "IDENTIFYING RISK FACTORS FOR CONFLICT BEHAVIOURS IN CANADIAN RIDING LESSON HORSES"

- Won "Best Student Research Presentation" award
- Posted on the CCSAW YouTube channel on May 28th, 2024 remains publicly available May 13th, 2024 - International Society for Equitation Science (ISES) NZ Conference Bite-Sized Interviews (Ep. 10: Caleigh Copelin) going more in-depth about the conference talk "IDENTIFYING RISK FACTORS FOR CONFLICT BEHAVIOURS IN CANADIAN RIDING LESSON HORSES"

May 28th, 2024 - ISES AGM student presentation "Understanding the welfare challenges of riding lesson horses"

April 11th, 2025 - U of G 3-Minute Thesis competition. Caleigh Copelin summarized the findings and goals of the study on riding lesson horses to date.

• Won 3rd place in the OAC heat of the competition

December 2nd, 2024 Equine Guelph news release: Study looks at the welfare of lesson horses https://thehorseportal.ca/2024/12/study-looks-at-welfare-of-lesson-horses/ (this story was picked up on December 22nd, 2024 by Equitation Science International on their social media pages:

https://www.facebook.com/100064546905838/posts/992228339605387/?\_rdr)

#### Dr. Wendy Pearson

Podium presentation at Calgary Equine International Symposium (2024): Effects of Spirulina supplementation on systemic responses, inflammatory, and oxidative stress markers in horses during the high-intensity exercise

Poster presentation at 12th European Equine Health & Nutrition Congress (2025): Effects of Spirulina Supplementation on Inflammatory and Oxidative Stress Markers in Exercising Horses

#### Dr. Chris Riley

2024 OVC Graduate Student Research Symposium: Poster presentation "Bacterial Isolates Recovered from Neonatal Sick Foals & Their Antimicrobial Susceptibility" Daniela Espinosa Seone, Christopher B Riley, Luis Arroyo and Ashley Spencer. 10th July 2024, OVC, University of Guelph, Guelph, ON.

2024 Calgary International Equine Symposium: Innovation in Equine Health & Welfare. Poster presentation "Bacterial Isolates Recovered from Neonatal Sick Foals & Their Antimicrobial Susceptibility" Daniela Espinosa Seone, Christopher B Riley, Luis Arroyo and Ashley Spencer. 5-6th Sept 2024, Spruce Meadows, Calgary, AB.

#### Dr. Alexander Valverde

Henderson ARP, Valverde A, Côté N, Sanchez A, Johnson R, Arroyo L. Comparison of two intraoperative lidocaine constant rate infusions (CRI) on cardiopulmonary function and quality of recovery in healthy horses maintained with isoflurane and a CRI of dexmedetomidine for arthroscopic surgery. Annual Conference of the American College of Veterinary Anesthesiologists and Analgesia, Denver, Colorado, USA, September 2024.

### Appendix 8: Presentations and Talks Given by Equine Guelph

### Presentations & Talks by Gayle Ecker

May 1, 2024 "Building connections in the world of equine well-being" Gayle Ecker and Dr. Nic de Breuwere, Horses and Humans Research Foundation https://www.youtube.com/watch?v=emzWGS8A1pM

October 5, 2024 "Journey Through the Horse's Gut" Gayle Ecker, Atlantic Conference Equine Symposium, Dalhousie Agricultural Campus Truro, Nova Scotia. Gayle Ecker, Equine Industry Symposium, University of Guelph.

November 19, 2024 "Care and Welfare: Course focus on the Equine Code of Practice" Gayle Ecker, Equine Industry Symposium, University of Guelph.

January 12, 2025 "Journey Through the Horse's Gut" Grey County Agricultural Services Annual Meeting, Elmwood, Ontario

April 29, 2025 "Equine Welfare Assessment Training for Provincial Animal Welfare Services" Gayle Ecker and Dr. Shane Bateman, Humane Canada National Conference, Montreal, Quebec

### Presentations & Talks by Susan Raymond

- **S. Raymond**, "Large Animal Rescue Introduction", EG LAER Operational Level Course, July 1, 2024, University of Guelph, Guelph, ON
- **S. Raymond**, "Large Animal Rescue Introduction", ERC lunch time talk, November 1, 2024, University of Guelph, Guelph, ON

### Appendix 9: Educational Offerings by Equine Guelph

# Educational Courses offered by Equine Guelph and Open Learning and Educational Support

Advanced Equine Health through Nutrition (Instructor: Dr. Kathleen Crandell PhD)

Advanced Equine Behaviour (Instructor: Dr. Robin Foster PhD)

Equine Behaviour (Instructor: Zoë Thorbergson MSc & Cathy Wentworth-Stanley MSc)

Equine Business Finance and Risk Management (Instructor: Dr. Julie Fischer MBA, D.M.& Dr.

Ev Post DVM)

Equine Business Management (Instructors: Rachael Hunter MBA & Christine Polhkamp)

Equine Event Management (Instructor: Shellie Kwitkowski MBA)

Equine Genetics (Instructor: Dr. Dianne Winkelman-Sim PhD)

Equine Journalism (Instructor: Anna Sochocky)

Equine Nutrition (Instructor: Nicole Weidner PhD)

Equine Welfare (Instructor: Gayle Ecker MSc)

Exercise Physiology (Instructor: Brittany Davis)

Equine Functional Anatomy (Instructor: Dr. Jeff Thomason PhD)

Global Perspectives in Equid Welfare (Instructor: Dr. Tamara Tadich, PhD DVM)

Management of the Broodmare, Stallion and Foal (Instructor: Catherine Williams)

Equine Health & Disease Prevention (Instructor: Dr. Ev Post DVM)

Management of the Equine Environment (Instructors: Dr. Susan Raymond PhD & Cathy

Wentworth-Stanley MSc)

Marketing & Communications in the Equine Industry (Instructor: Tracy Dopko)

Stewardship of the Equine Environment (Instructor: Dr. Susan Raymond PhD)

The Equine Industry (Instructor: Gayle Ecker MSc)

### Short Online courses (19) offered by Equine Guelph on TheHorsePortal.ca

Careers in the Horse World for Youth (On-Demand)

Equine Business 101 (On-Demand)

Equine First Aid (Instructor: Dr. Laura Frost, DVM)

Fire and Emergency Preparedness (Instructor: Dr Susan Raymond, PhD; Dr Rebecca Husted, PhD)

Gut Health and Colic/Ulcer Prevention (Instructor: Dr Nicole Weidner, PhD)

Horse Behaviour and Safety (Instructor: Dr. Rebecca Husted, PhD)

Horse Behaviour and Safety for Youth (On-Demand)

Horse Care and Welfare (Instructor: Gayle Ecker, MSc)

Introduction to Body Condition Scoring (On-Demand)

Introduction to Body Condition Scoring (Instructor: Dr Nicole Weidner, PhD)

Introduction to Forage (Instructor: Dr Paul Sharpe, PhD)

Provincial Foundations Officials Course (On-Demand)

Racehorse Lameness & Injury Prevention and Care (Instructor: Dr. Melissa McKee, DVM)

Racehorse Respiratory Health (Instructors: Drs. Sarah Shaw and Amy Lack, DVM)

Racehorse Gut Health & Ulcer/Colic Prevention (Instructor: Dr Nicole Weidner, PhD)

Sickness Prevention in Horses (Instructor: Dr Susan Raymond, PhD)

Sport Horse Lameness & Injury Prevention and Care (Instructor: Dr. Bri Henderson, DVM)

The Senior Horse (Instructor: Dr. Bettina Bobsien, DVM)

Horse Trailer Safety (Part One) (Instructor: Dr. Rebecca Husted)

### Appendix 10: Summary of the Equine Studies program

### Diploma in Equine Studies

The diploma in equine studies requires 6 core and 4 elective courses. In 2009 we awarded our first Diploma in Equine Studies. With 26 diplomas awarded in 2024/25, the total number of diplomas awarded has increased to 463.

### **Program Requirements**

Diploma Required/Core Courses:

2200000	Management of the Equine Environment
2200004	Equine Health and Disease Prevention
2200006	Equine Nutrition
2200005	Equine Functional Anatomy
2200002	Equine Behaviour
2200010	Stewardship of the Equine Environment

Electives students can choose from the Equine Science specialty:

2200001	1 Equine Exercise Physiology		
2200008	Equine Genetics		
2200018	Management of the Broodmare, Stallion and Foal		

and/or combine courses from the Equine Business Management courses:

2200007	Equine Journalism
2200009	Equine Event Management
2200011	The Equine Industry
2200012	Equine Business Finance and Risk Management
2210002	Equine Business Management
	Marketing and Communications in the Equine
2240000	Industry
2200017	Global Perspectives in Equid Welfare

and/or combine courses from the Equine Welfare certificate:

2200011	The Equine Industry
2200013	Equine Welfare
2200017	Global Perspectives in Equid Welfare
2200014	Advanced Equine Health through Nutrition
2200015	Advanced Equine Behaviour

### **Equine Science Certificate**

The Equine Science Certificate requires 4 core and 2 elective courses. The first Equine Science Certificates were awarded in 2004/05 to 36 students. With 13 Equine Science Certificates awarded in 2024/25, to date 528 Equine Science Certificates have been awarded.

Program Requirements:

· · · · · · · · · · · · · · · · · · ·			
2200000	Management of the Equine Environment	Required	
2200004	Equine Health and Disease Prevention	Required	
2200006	Equine Nutrition	Required	
2200005	Equine Functional Anatomy	Required	
2200002	Equine Behaviour	Elective	
2200001	Equine Exercise Physiology	Elective	
2200008	Equine Genetics	Elective	
2200018	Management of the Broodmare, Stallion and Foal	Elective	

### Certificate in Equine Business Management

The Certificate in Equine Business Management requires 5 core and 1 elective course. With 7 Certificates in Equine Business Management awarded in 2024/25, to date 107 Equine Business Management Certificates have been awarded.

Program Requirements:

2200000	Management of the Equine Environment	Required
2200011	The Equine Industry	Required
2200012	Equine Business Finance and Risk Management	Required
2210002	Equine Business Management	Required
	Marketing and Communications in the Equine	
2240000		Required
2200017	Global Perspectives in Equid Welfare	Elective
2200010	Stewardship of the Equine Environment	Elective
2200007	Equine Journalism	Elective
2200009	Equine Event Management	Elective

### **Equine Welfare Certificate**

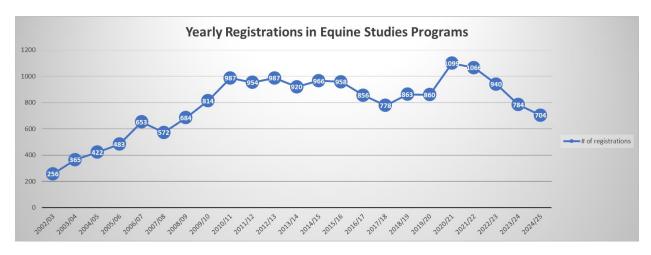
The Equine Welfare Certificate requires 4 core and 2 elective courses. The Equine Welfare Certificate is a partnership between Equine Guelph, Campbell Centre for the Study of Animal Welfare and Open Learning and Educational Support. With 6 Certificates in Equine Welfare awarded in 2024/25, to date 53 Equine Welfare Certificates have been awarded.

2200011	The Equine Industry	Required
2200013	Equine Welfare	Required
2200017	Global Perspectives in Equid Welfare	Required
2200002	Equine Behaviour	Elective
2200006	Equine Nutrition	Elective
2200014	Advanced Equine Health through Nutrition	Elective
2200015	Advanced Equine Behaviour	Elective

### 2024– 2025 Student Registration Profile

New students	178
Total Individual Students	393
Total Number of registrations	704

### **Equine Yearly Student Registration Summary**



### Yearly Student Registration All Programs and Courses

Year	# of registrations	Projections	# of Unique Students
2002 - 2003	256	180	Students
2002 2003	365	360	
2004 - 2005	422	480	
2005 - 2006	483	540	
2006 - 2007	653	760	
2007 - 2008	572	600	
2008 - 2009	684	710	
2009 - 2010	814	888	
2010 - 2011	987	1009	503
2011 - 2012	954	949	524
2012 - 2013	987	1125	487
2013 - 2014	920	1110	503
2014 - 2015	966	995	516
2015 - 2016	958	975	530
2016 - 2017	856	975	540
2017 - 2018	778	900	545
2018 - 2019	863	920	562
2019 - 2020	860	920	516
2020 - 2021	1099	1000	607
2021 - 2022	1066	1000	707
2022 - 2023	940	1000	596
2023 – 2024	784	1000	446
2024 – 2025	704	950*	393

<sup>\*</sup>Projection based on last 5 years registrations numbers

### New Students by Semester

S24	53	
F24	78	
W25	47	
Total New Students	178	

### **Enrollment Count Reporting**

### Summer 2024

Management of the Equine Environment	29
Equine Exercise Physiology	25
Equine Behaviour	22
Equine Nutrition	38
Equine Business Finance & Risk Management	19
Global Perspectives in Equid Welfare	8
Total enrollment Summer 2024	194

### Fall 2024

Management of the Equine Environment	
Equine Behaviour	44
Equine Health & Disease Prevention	30
Stewardship of the Equine Environment	40
Equine Welfare	32
Management of Broodmare, Stallion and Foal	35
Equine Business Management	25
Total enrollment Fall 2024	236

### Winter 2025

Management of the Equine Environment	
Equine Health & Disease Prevention	
Equine Functional Anatomy	64
Equine Nutrition	51
Equine Genetics	26
The Equine Industry	
Advanced Equine Health through Nutrition	
Marketing & Communications in the Equine	
Industry	
Total enrollment Winter 2025	274

### **TOTAL ENROLLMENTS**

704

### **Advanced Courses**

Course	Semester	# of registrations
Advanced Equine Health Through Nutrition	W25	16
	TOTAL	16

### **Equine Welfare Certificate Courses**

The Equine Welfare Certificate is a partnership between Equine Guelph, Campbell Centre for the Study of Animal Welfare and Open Learning and Educational Support.

Course	Semester	# of registrations
Global Perspectives in Equid Welfare	S24	8
Equine Welfare	F24	32
	TOTAL	40

#### **Course Distribution**

### Number of courses offered each year

Year	Courses
2002 - 2003	4
2003 - 2004	6
2004 - 2005	8
2005 - 2006	9
2006 - 2007	13
2007 - 2008	10
2008 - 2009	12
2009 - 2010	16
2010 - 2011	19
2011 - 2012	21
2012 - 2013	24
2013 - 2014	21
2014 - 2015	22
2015 - 2016	22
2016 - 2017	23
2017 - 2018	21
2018 - 2019	26
2019 – 2020	22
2020 - 2021	22
2021 - 2022	23
2022 - 2023	24
2023 - 2024	23
2024 – 2025	23

### Different individual courses available

Year	Courses
2002 - 2003	3
2003 - 2004	4
2004 - 2005	6
2005 - 2006	7
2006 - 2007	8
2007 - 2008	7
2008 - 2009	11
2009 - 2010	14
2010 - 2011	15
2011 - 2012	17
2012 - 2013	19
2013 - 2014	16
2014 - 2015	17
2015 - 2016	17
2016 - 2017	18
2017 - 2018	16
2018 - 2019	17
2019 - 2020	14
2020 - 2021	17
2021 - 2022	17
2022 - 2023	17
2023 - 2024	18
2024 – 2025	17

### Where Students Are Coming From

**Canadian Students (enrolled)** 

Garragian C	taaon	
AB	43	13.44%
BC	42	13.13%
MB	11	3.44%
NB	9	2.81%
NL	6	1.88%
NS	12	3.75%
ONT	159	49.69%
PE	1	0.31%
QC	31	9.69%
SK	4	1.25%
YT	2	0.63%
	320	

# **International Students (enrolled)**

Australia	1
Columbia	1
Denmark	2
France	1
Germany	2
Japan	3
Mexico	1
Mozambique	1
New Zealand	2
Poland	1
Russia	1
Singapore	2
South Africa	2
Sweden	2
UAE	1
UK	1
	24

# **US Students (enrolled)**

OO Ottudents	
	1
CA	2
СО	1
СТ	1
DC	2
FL	3
ID	3 2 1
IL	
KS	1
MA	2
MD	3 2 1
MI	2
MN	
МО	1
NC	2
NH	1
NY	2
ОК	1 2 2
PA	2
SC	2
SD	2
TX	4
AR CA CO CT DC FL ID IL KS MA MD MI MN MO NC NH NY OK PA SC SD TX VA WA WI	2 2
WA	2
WI	
	46

### Registered Unique Students by Geographic Location

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023/24	2024/25
CAN	459	442	461	451	424	428	428	387	469	573	498	360	320
US	31	54	38	44	56	40	40	94	88	93	62	57	46
INT	13	20	23	45	45	80	94	50	50	40	37	29	24
	503	516	522	540	525	548	562	572	607	706	597	446	390

### Graduates of our Certificates and Diploma Program of Studies

Fiscal Year	ESC	CEBM	DipES	WEL
2004/05	36	n/a	n/a	n/a
2005/06	27	n/a	n/a	n/a
2006/07	32	n/a	n/a	n/a
2007/08	25	n/a	n/a	n/a
2008/09	38	n/a	n/a	n/a
2009/10	20	n/a	22	n/a
2010/11	30	2	13	n/a
2011/12	30	6	23	n/a
2012/13	28	7	29	n/a
2013/14	19	9	25	n/a
2014/15	21	6	20	n/a
2015/16	50	14	38	3
2016/17	27	6	34	3
2017/18	15	8	29	4
2018/19	20	10	27	8
2019/20	31	13	49	7
2020/21	18	4	37	3
2021/22	13	2	23	4
2022/23	13	4	39	8
2023/24	22	9	29	7
2024/25	13	7	26	6
	528	107	463	53

ESC - Equine Science Certificate

CEBM – Certificate in Equine Business Management

DipES – Equine Studies Diploma

WEL - Certificate in Equine Welfare

### The Horse Portal 2024 - 2025

Course Offering Overview 2024-2025

	Enrollment Total	Enrollment PTSO	# Paid Students	% Paid Enrollment	Revenue
The Senior Horse – F24	21	11	17	81%	\$1,472
Horse Care & Welfare		_			
– F24*	27	6	25	93%	\$3,003
Equine First Aid - F24*	40	14	30	75%	\$2,982
Sport Horse					
Lameness/Injury -			_	070/	0007
F24**	26	3	7	27%	\$637
Fire and Emergency	<b></b>	_	4.4	050/	Φ4 <b>5</b> 0 <b>5</b>
Preparedness - F24*	57	5	14	25%	\$1,505
Introduction to Body	4.0			400/	4040
Cond. Scoring – W25*	42	8	8	19%	\$616
Racehorse					
Respiratory Health –	91		13	14%	¢4 224
W25**	91	-	13	1470	\$1,221
Gut Health & Colic Prev W25	36	11	22	61%	\$1,933
riev WZ3	30	11		0170	Ψ1,933
Racehorse Gut Health					
& Colic – W25**	93	-	3	3%	\$380
Horse Behaviour &					
Safety - W25	26	4	11	42%	\$988
Sickness Prevention in					
Horses – W25**	287	55	13	5%	\$1,207
Equine First Aid – S25	24	12	23	96%	\$1,837
Horse Trailer Safety – S25**	53	9	22	42%	\$1,962
Introduction to Forage					
– S25	18	4	17	94%	\$1,425
Equine Business 101					
– On Demand	45	8	41	91%	\$1,709
Introduction to BCS –					
On Demand	90	11	54	60%	\$1,796
Provincial Officials				·	
Course – On Demand	14	12	12	86%	\$975
Careers in the Horse	465	_			
World – On Demand**	138	2	-	0%	-
Horse Behaviour &					
Safety for Youth – On	047			400/	<b>#70</b> 5
Demand**	217	3	29	13%	\$725
Total	1345	178	361	49%	\$26,372

<sup>\*</sup>Course offered as part of a "buy-one-get-one-half-off" package deal or BOGO deal

\*\*Course registrations available for free with use of coupon, through partnership with sponsor

### Course Enrollment Stats

Year	Total Enrollment	Federation Enrollment	% Federation Enrollment
2016-2017	58	35	60%
2017-2018	434	207	48%
2018-2019	681	333	49%
2019-2020	1153	155	13%
2020-2021	1626	182	11%
2021-2022	2817	289	10%
2022-2023	1163	158	14%
2023-2024	1691	161	9%
2024-2025	1345	178	13%

### Provincial Breakdown

PTSO	Registered Students – 2024-25
Alberta (AEF)	14
British Columbia (HCBC)	27
Manitoba (MHC)	7
New Brunswick (NBEA)	9
Newfoundland (NLEA)	2
Nova Scotia (ENS)	15
Ontario (OE)	70
Prince Edward Island (IHC)	7
Saskatchewan (SHF)	4
Yukon (EAY)	3
Totals	158
% of Registrations:	14%

### Appendix 11: Equine Guelph's Promotional Events

#### Displays and Events for Equine Guelph programs

#### Events Calendar - 2024-25

Large Animal Emergency Rescue Awareness Level Training, Holly Oaks Equestrian Facility, Lynden, ON, Apr 30, 2025

Animal Welfare Services training, Puslinch, ON, Apr 15 – 17, 2025

Horse Heritage Movie Night, Erin, ON, Mar 26, 2025

King Charles III Coronation Medal Awarded to Equine Guelph Director Gayle Ecker, Acton, ON, Jan 24, 2025

AAEP 70th Annual Convention, Orlando, Florida, Dec 7 – 11, 2024

Canadian Equine Law – Part 2 – 'Woe' to 'Whoa' – Preventing Legal Calamities in your Stable online with Catherine Willson, BA, LLB, Nov 25, 2024

Large Animal Emergency Rescue Awareness Level course - veterinary student offering, University of Guelph, Guelph, ON, Nov 23, 2024

AgScape Career Competition, Grand River Ag Society, Elora, ON, Nov 20 – 21, 2024

9th Equine Industry Symposium Cracking the code on Equine Welfare - virtual event. November 19-20, 2024

Animal Welfare Services training, Puslinch, ON, Nov 4 - 6, 2024

Gayle Ecker receives international recognition for 20 years of Leadership, Arboretum Centre, Guelph, ON Oct 22, 2024

Large Animal Emergency Rescue Awareness Level Course, Windsor-Essex Therapeutic Riding Association, Essex, ON Oct 18, 2024

Youth Derby Awards and Horse Portal courses presented by the Bill Galvin Racing Alliance, Mohawk Raceway, Campbellville, ON, Oct 5, 2024

Atlantic Canada Equine Symposium 2024, Truro, Nova Scotia, Oct. 5, 2024

EquiMania! at Fergus Fall Fair, Sept 14 – 15, 2024

Animal Welfare Services training, Puslinch, ON, Sept 9 - 11, 2024

Free Equine Law Webinar online with Catherine Willson, BA, LLB, August 29, 2024

Minnesota Fair – EquiMania! Display, Minnesota, USA, Aug 22 - Sept 2, 2024

Industry Day at Grand River Raceway, Elora, ON, August 5, 2024

Horse Capades - EquiMania! Display, CNE, Toronto, ON, August 4 - 15, 2024

Large Animal Emergency Rescue Operational Level course, University of Guelph, Guelph, ON. June 28 – 30, 2024

Equine Guelph at Guelph/Eramosa Fire Department Open House, Guelph, ON, May 11, 2024

Animal Welfare Services training, Puslinch, ON, May 6 - 8, 2024

### Appendix 12: Media Coverage Summary

Topic	Articles (May 1, 2024-April 30, 2025)
Research	76
Education	134
Special Projects	40
EquiMania!	29

### Coverage of Special Events, Programs or Research Projects

Торіс	Articles (May 1, 2024- April 30, 2025)
TheHorsePortal.ca courses	24
Large Animal Emergency Rescue	15
Biosecurity Calculator w/ Partner EDCC	14
Ontario Equine Education Employment Program	13
Portal Free Racing courses	13
Careers in the Horse Industry (for Youth)	12
Preventing Dehydration in the Horse (Ecker, Lindinger)	12
Free Youth Horse Behaviour Course	11
12-week Equine Guelph Courses	10
Law Webinar (OEEEP sponsored)	10
Gayle Ecker Awarded King Charles III Coronation  Medal	8
Gayle Ecker Acknowledged for Equine Guelph	
Leadership Inspiring a \$7 million bequest	7
World Horse Day (Sickness Prevention Course)	7
Testing 1-2-3 - Strangles Research (Weese)	7
Study: Blindfolding Horses Probably Not Helpful in	
Emergencies	7
Study Looks at Welfare of Lesson Horses	7
What if my mare does not get pregnant? (Chenier)	6

# Total Features: 279

100% of 40 media releases sent out by Equine Guelph this fiscal year were picked up for further distribution. Equine Guelph's releases are distributed to a media list of over 160

equine media outlets including national and provincial associations and partners and a growing number of personal social media sites from our students to disseminate our communications to industry participants in Ontario and worldwide. This network includes Facebook, LinkedIn, Instagram, and YouTube. Our growing followers include Horse-Canada magazine, Horse Sport Magazine, The Paulick Report, EquiMed, Equine Chronicle, Small Farm Canada and more.

Equine Guelph shared 440 posts on Facebook resulting in a collective reach of over 84,000. The Equine Guelph initiative with the highest engagement on Facebook was the World Horse Day promotion which consisted of a free HorsePortal.ca course – Sickness Prevention in Horses. Large Animal Emergency Rescue workshops were the next most engaging social media posts.

Articles and news pertaining to TheHorsePortal.ca education offerings continue to be very popular. In 2024-25, the course offerings developed for Racing-focused courses on Respiratory and Gut Health and Colic Prevention were very well received. The relaunch of a newly upgraded Biosecurity Risk Calculator with new education partner, the Equine Disease Communication Center (EDCC), was hugely popular in the press. Interest continues to grow in the Large Animal Emergency Rescue workshops.

Equine Guelph's investment in membership with American Horse Publications (AHP) has given a much wider audience with their distribution of 2 media articles per month which are then distributed to a broad list of U.S. equine publications.

#### Media Coverage List

Date	Magazine or website	Article
24-	NWHorseSource.com	Testing for Strangles
May		
24-	Horse-Canada.com	Testing for Strangles
May		
24-	OVC.uoguelph.ca	Testing 1-2-3 - Strangles Research
May		
24-	Cayuse Communications Nicker	Equine Guelph healthcare tools for horse
May	News	owners
24-	Hoofbeats HorseJournals.com	What's in a Whinny
May		
24-	Hoofbeats HorseJournals.com	Necrotizing Enterocolitis with Dr. John Prescott
May		(archived Research Radio podcast)
24-	Equine Science Update	Assessing the impact of blindfolding on equine
May		handling (Copelin)

24- May	EquineChronicle.com	Assessing the impact of blindfolding on equine handling (Copelin)
24- May	HorseSport.com	Free Horse Care Course Changing Lives and Careers
24- May	AmericanHorsePubs.org	Equine Guelph Healthcare Tools for the Win
24- May	AmericanHorsePubs.org	Testing 1-2-3 - Strangles Research
24- May	EquiMed.com	What to do if your horse is sick checklist
24- May	OntarioEquestrian.ca	Ontario Equine Education Employment Program
24- Jun	Small Farm Canada	Equine Guelph Research Annual
24- Jun	HorseJournals	Testing 1-2-3 - Strangles Research
24- Jun	Saddle Up Magazine	Researching Infertility in Mares due to Endometritis (Chenier)
24- Jun	HorseJournals.com Hoofbeats	How to Prevent Dehydration in Your Horse (Lindinger, Ecker)
24- Jun	HorseJournals.com Hoofbeats	OEEEP Program Continues Creating Pathways to Employment in the Equine Industry
24- Jun	PaulickReport.com	University Of Guelph to Study Selenium Levels In Ontario Broodmares And Foals
24- Jun	OVC.uoguelph.ca	Dr. Luis Arroyo Examines Selenium Deficiency in Ontario Broodmares and Foals
24- Jun	Hoofbeats HorseJournals.com	Test Your Horse Hay Knowledge
24- Jun	Hoofbeats HorseJournals.com	Understanding Strangles
24- Jun	Hoofbeats HorseJournals.com	Equine Ticks with Dr. Luis Arroyo (video)
24- Jun	TheRider.com	Ontario Equine Education and Employment Program, Turning Darkness to Light (front page)
24- Jun	TheRider.com	Ontario Equine Education and Employment  Program full page ad
24- Jun	TheRider.com	Testing 1-2-3 - Strangles Research
24- Jun	Horse-Canada.com	Who Knew? Free Horse Trivia e-book
24- Jun	Horse-Canada.com	Preventing Dehydration in Your Horse
24- Jun	OVC Bulletin	Preventing Dehydration in Your Horse
24- Jun	DrGarbers.com	Wildfires and Animals: What To Do. (Beeler- Marfisi research link)

CTV News TV coverage & article	Fire Crews from Across Ontario Take Part in
	Large Animal Rescue Training in Guelph
AmericanHorsePubs.org	Study to Examine Selenium blood concentration
	in Ontario Broodmares and foals
AmericanHorsePubs.org	Horse Trivia Time
	B B
AmericanHorsePubs.org	Preventing Dehydration in Your Horse (Ecker,
Ctandardhrad Canada as	Lindinger)
StandardbredCanada.ca	Preventing Dehydration in the Horse (Ecker,
EquipoChroniala com	Lindinger) Horse Trivia Time
Equine Chronicle.com	Horse Trivia Time
EquipeChronicle.com	Preventing Dehydration in The Horse (Ecker,
Equine Chionicle.com	Lindinger)
FauiMed com	Stepping out of the Dark With a Study on
Equivica.com	Blindfolding Horses
NWHorseSource.com	Preventing Dehydration in The Horse (Ecker,
14441101000001100100111	Lindinger)
ColoradoHorseSource.com	Preventing Dehydration in The Horse (Ecker,
	Lindinger)
ARIA.com	Preventing Dehydration in The Horse (Ecker,
	Lindinger)
OVC Bulletin	<u>, , , , , , , , , , , , , , , , , , , </u>
	Fire Crews from Across Ontario Take Part in Large Animal Rescue Training in Guelph, Ontario
AmericanHorsePubs.org	Researching Biomarkers to Understand Joint Health
HorseJournals.com	Ontario Equine Education & Employment Program (OEEEP) business listing
HorseJournals.com Hoofbeats	How to Prevent Dehydration in Your Horse
-	,
PaulickReport.com	11 Tips to Prevent Dehydration in your horse
·	
HorseJournals.com Hoofbeats	Developing the Sport Horse - The importance of
	hydration
HorseJournals.com Hoofbeats	How to Test Your Horse for Dehydration
TheRider.com	Researching Biomarkers to Understand Joint Health
TheRider.com	Study to Examine Selenium blood concentration
	in Ontario Broodmares and foals
TheRider.com	Preventing Dehydration in Your Horse
StandardbredCanada.ca	Researching Biomarkers to Understand Joint Health
	AmericanHorsePubs.org  AmericanHorsePubs.org  AmericanHorsePubs.org  StandardbredCanada.ca  EquineChronicle.com  EquiMed.com  NWHorseSource.com  ColoradoHorseSource.com  ARIA.com  OVC Bulletin  AmericanHorsePubs.org  HorseJournals.com  HorseJournals.com  HorseJournals.com  HorseJournals.com Hoofbeats  PaulickReport.com  HorseJournals.com Hoofbeats  TheRider.com  TheRider.com  TheRider.com

24- Jul	EquineChronicle.com	Researching Biomarkers to Understand Joint Health
24-	StandardbredCanada.ca	Researching New Method To Measure Cartilage
Jul		Quality (Koenig/Changoor)
24-	AmericanHorsePubs.org	From Passion to Profession Shelby Embraces
Jul		Equine Science (Tuition award)
24-	StandardbredCanada.ca	Researchers Study Selenium in Ontario
Jul	I I awa a a limba a awa	Broodmares and Foals
24- Jul	Harnesslink.com	Equine Guelph trains firefighters in large animal rescue
24-	Muckrack.com	Equine Guelph trains firefighters in large animal
Jul	Washi ashi sam	rescue
24-	North American Trainer	The latest Strangles research available testing
Jul		for ultimate sensitivity to avoid infection (Weese)
24-	European Trainer Magazine	Electroarthography to Predict Cartilage Quality
Jul		(Koenig/Changoor)
24-	WellingtonAdvertiser.com	Let's Grow Ontario's Equine Industry Together
Jul 24-	HorooChort com	(full page ad OEEEP)
Jul	HorseSport.com	A New Way to Diagnose Degenerative Joint Disease. (Koenig/Changoor)
24-	WellingtonAdvertiser.com	Horses' eyes, ears, tails say a lot about how they
Jul	Womington, tavorticon.com	feel (Zoe Thorbergson)
24-	WellingtonAdvertiser.com	Let's Grow Ontario's Equine Industry Together
Jul		(1/2-page ad OEEEP)
24-	WellingtonAdvertiser.com	Large Animal Emergency Rescue Workship
Jul		Canada Day Weekend
24- Jul	WellingtonAdvertiser.com	Equine Studies Online (1/8-page ad)
24-	HorseSport.com	Groundbreaking Study Examines Biomarkers
Jul	,	and Joint Health
24-	OntarioEquestrian.ca	OEEEP Training Employees for the Equine
Jul		Industry
24-	BGRacingAlliance.ca	BGRA Wants Young Writers and Artists for
Aug	EnviMed con	Contests!
24- Aug	EquiMed.com	Advocating for the Underdog through Education in Equine Welfare
24-	ThePlaidHorse.com	Study to Examine Selenium blood concentration
Aug	11101 16161 10100.00111	in Ontario Broodmares and foals
24-	HorseJournals.com Eblast	Atlantic Canada Equine Symposium
Aug		
24-	Horse-Canada.com	Surprising Finds from Blindfold Study
Aug		
24-	OVC Bulletin	Stepping out of the Dark with a Study on
Aug	OVC Bulletin	Blindfolding Horses
24- Aug	OVC Bulletin	New Method to Measure Cartilage Quality with  Judith Koenig
Aug		Judiui Noeilig

24-	OHHA.ca	Equine Law Webinar - Catherine Willson
Aug	Llaws a Con ant a suc	Facciona Lacco Mahinana Cathanina Millaga
24- Aug	HorseSport.com	Equine Law Webinar - Catherine Willson
24-	TheRider.com	Equine Law Webinar - Catherine Willson
Aug		
24-	BarnMice.com	Equine Law Webinar - Catherine Willson
Aug		
24-	EquestrianCanada.ca	Equine Law Webinar - Catherine Willson
Aug		
24-	OntarioEquestrian.ca	Equine Law Webinar - Catherine Willson
Aug		
24-	OVC Bulletin	Equine Law Webinar - Catherine Willson
Aug		
24-	PaulickReport.com	Study: Blindfolding Horses Probably Not Helpful
Aug		in Emergencies
24-	AmericanHorsePubs.org	Equine Studies Online: Transforming Dreams
Aug		through the Power of Education
24-	AmericanHorsePubs.org	Advocating for the Underdog through Education
Aug		in Equine Welfare
24-	Farms.com	World Rabies Day - Horse owners can stop the
Aug	I la wa a a dia ka a wa	spread
24-	Harnesslink.com	World Rabies Day 'One Health' approach and
Sep 24-	Muckrack.com	the horse owner World Rabies Day 'One Health' approach and
Sep	WIUCKI ack.com	the horse owner
24-	TheRider.com	Senior Horse Education Month Features Arthritis
Sep	merdaer.com	and Pain Recognition
24-	AmericanHorsePubs.org	Senior Horse Education Month Features Arthritis
Sep	, and near nerves aboverg	and Pain Recognition
24-	StandardbredCanada.ca	Senior Horse Education Month Features Arthritis
Sep		and Pain Recognition
24-	AmericanHorsePubs.org	World Rabies Day One Health Approach and the
Sep	_	Horse Owner
24-	AmericanHorsePubs.org	Senior Horse Education Month Recognizing
Sep		Arthritis and Pain
24-	HorseJournals.com Hoofbeats	Preparing Fences before the Freezing
Sep		Temperatures
24-	BGRacingAlliance.ca	Bill Galvin Racing Alliance to Host Youth Derby
Oct		Awards (Equine Guelph Youth Behaviour
		course)
24-	BGRacingAlliance.ca	Youth Derby Awards Presented (Equine Guelph
Oct		Youth Behaviour course)
24-	HorseNovaScotia.ca	Education Awareness (Portal courses)
Oct		

24-	TheRider.com	Equine Studies Online: Transforming Dreams
Oct	THE NACT. SOM	through the Power of Education
24-	TheRider.com	World Rabies Day 'One Health' approach and
Oct		the horse owner
24-	AlbertaEquestrian.com	Alberta Equestrian Resources Equine Health
Oct	·	Welfare - Biosecurity
24-	AlbertaEquestrian.com	Alberta Equestrian Resources Equine Health
Oct		Welfare Education (Portal course mention)
24-	ManitobaHorseCouncil.ca	Fire & Emergency Preparedness course - event
Oct		listing
24-	HorseSport.com	Gayle Ecker's Legacy of Leadership in Equine
Oct		Research, Education
24-	Essex Free Press	OVC Veterinary Students Train for Large Animal
Oct	140	Emergency Rescue
24-	Windsor.ctvnews.ca	Windsor-Essex First Responders Learn How to
Oct	CDC	Rescue Large Animals
24- Oct	CBC.ca	What does a fire fighter need to know about horses? - VIDEO NEWS FOOTAGE
24-	CTV News	Windsor-Essex first responders learn how to
Oct	CI V News	rescue large animals
24-	StandardbredCanada.ca	Ecker Recognized as Equine Guelph Announces
Oct	otandardsredodnada.oa	Gift
24-	StandardbredCanada.ca	Bill Galvin Racing Alliance to Award Youth
Oct		Derby Winners (Portal youth behaviour course)
24-	OVC.uoguelph.ca	Gayle Ecker Acknowledged for Equine Guelph
Oct	<b>5</b> .	Leadership Inspiring a \$7 million bequest
24-	OntarioRacing.com	Equine Guelph Announces Poll and Free Online
Nov		Courses for Racing Industry
24-	OntarioRacing.com	Industry Ambassadors Announced for Free
Nov		Online Racing-Exclusive Training Program
24-	CosaOnline.com	Equine Guelph Announces Poll & Free Online
Nov		Courses for Racing Industry
24-	EquiMed.com	Equine Law Webinar Woe to Whoa
Nov	Carrin Andrews	Fall is Coursial Times for December Of the state of
24- Nov	EquiMed.com	Fall is Crucial Time for Dental Check-up
Nov 24-	WSPS.ca	Especially for Senior Horses Fall Farm Safety - listed EG Barn Fire resources,
Nov	WOF 3.Ca	Portal Online Course & Tool!
24-	HorseJournals.com Hoofbeats	Watering Horses in the Winter
Nov	. 13. 333 Garrialo. 30111 1 10015 Gats	vvatoring rioroco in the vvintor
24-	HorseJournals.com Hoofbeats	Winter Management - Outdoor Horse
Nov		- Transcriber
24-	HorseJournals.com Hoofbeats	Winter Water Woes and Colic Prevention
Nov		
24-	HorseJournals.com Hoofbeats	How to Extend Your Horse Hay Supply
Nov		

24- Nov	Wellington Advertiser	Agricultural event empowers youth to join the industry
24-	AmericanHorsePubs.org	OVC Veterinary Students Train for Large Animal
Nov	American lereer abolety	Emergency Rescue
24-	AmericanHorsePubs.org	What if my Mare did not get Pregnant? Dr.
Nov	,ee	Chenier on Early Pregnancy Loss
24-	HorseSport.com	Free Webinar: Preventing Legal Calamities in
Nov	•	your Stable (OEEEP)
24-	StandardbredCanada.ca	Industry Ambassadors Named for Guelph
Nov		Courses
24-	StandardbredCanada.ca	Equine Law Webinar Today (OEEEP Law
Nov		webinar)
24-	StandardbredCanada.ca	Equine Guelph Seeks Feedback through
Nov		Industry Poll
24-	StandardbredCanada.ca	Equine Guelph announces Free Online Courses
Nov		
24-	SmallFarmCanada.ca	First Responders Trained in Large Animal
Nov		Rescue
24-	Canada's Equine Guide 2025 by	Dr. Susan Raymond - A Lifetime of Helping
Nov	Canadian Horse Journal	Horses
24-	Canada's Equine Guide 2025 by	Equine Studies (Across Canada - Mentions EG
Nov	Canadian Horse Journal	online 12 week & Portal courses)
24-	Canada's Equine Guide 2025 by	Gayle Ecker Acknowledged for Equine Guelph
Nov	Canadian Horse Journal	Leadership Inspiring a \$7 million bequest
24-	CosaOnline.com	Industry Ambassadors Announced for Free
Dec	DCD a sign with live and an	Online Racing-Exclusive Training Program
24- Dec	BGRacingAlliance.ca	Bill Galvin Racing Alliance Thanks Sponsors and
24-	CosaOnline.com	Donors (Equine Guelph youth course)  Free Racing Exclusive Courses
Dec	CosaOffilite.com	Tiee Nacing Exclusive Courses
24-	Harnesslink.com	What Pros at Royal Said About Equine Careers
Dec	Tarriessiirik.com	What i 103 at Noyal Gald About Equilic Galeers
24-	EquiMed.com	Study Looks at Welfare of Lesson Horses
Dec	=qaroa.oo	Clady Looke at Frontier of Loosen Heises
24-	StandardbredCanada.ca	Racehorse Respiratory Health Course Returns
Dec		
24-	HarnessLink.com	OVC Veterinary Students Train for Large Animal
Dec		Emergency Rescue
24-	PaulickReport.com	OVC Veterinary Students Undergo Large Animal
Dec	•	Emergency Rescue Training
24-	Muckrack.com	OVC Veterinary Students Undergo Large Animal
Dec		Emergency Rescue Training
24-	HorseSport.com	Careers in the Horse Industry - Success Stories
Dec		
24-	HorseJournals.com Hoofbeats	Horse Community Heroes: Dr. Susan Raymond
Dec		

24-	EquiMed.com	Ring in the New Year with a Free Horse
Dec	Equiviou.	Behaviour & Safety Course for Youth
24-	HorseJournals.com Hoofbeats	Gayle Ecker Acknowledged for Equine Guelph
Dec		Leadership Inspiring a \$7 million bequest
24-	TheRider.com	Gayle Ecker Acknowledged for Equine Guelph
Dec		Leadership Inspiring a \$7 million bequest
24-	TheRider.com	Racehorse Respiratory Health Course Back by
Dec		Popular Demand
24-	TheRider.com	Youth Derby Awards Presented (Portal courses
Dec		mentioned)
24-	TheRider.com	Equine Studies Instructor Retiring after teaching
Dec		hundreds of students (Dr. Thomason)
24-	TheRider.com	Gayle Ecker Acknowledged for Equine Guelph
Dec		Leadership Inspiring a \$7 million bequest
24-	AmericanHorsePubs.org	Study Looks at Welfare of Lesson Horses
Dec		
24-	AmericanHorsePubs.org	Ring in the New Year with a Free Horse
Dec		Behaviour & Safety Course for Youth
24-	HorseSport.com	Blindfolds, Horse Temperament and Resistance
Dec		Behaviour (Merkies, Copelin)
24-	StreamHorse.tv.com	Study Looks at Welfare of Lesson Horses
Dec		
24-	Yahoo.com/lifestyle	Study Suggests Horses at Larger Lesson Barns
Dec		Have Longer Hours, Show More Signs of Stress
24-	Muckrack.com	Study Suggests Horses at Larger Lesson Barns
Dec	5 " 15	Have Longer Hours, Show More Signs of Stress
24-	PaulickReport.com	Study Suggests Horses at Larger Lesson Barns
Dec	Davilial/Davant sam	Have Longer Hours, Show More Signs of Stress
24-	PaulickReport.com	Guelph To Offer Free Online Trainings In
Dec		Racehorse Respiratory Health, Racehorse Gut Health
24-	MuckRack.com	Guelph To Offer Free Online Trainings In
Dec		Racehorse Respiratory Health, Racehorse Gut
		Health
24-	EquusMagazine.com	Proactive Care Tips for Broodmares (w/ files
Dec		from EG Mare & Foal Tool)
24-	North American Trainer	Why Embryo's Can Fail and Improving odds of
Dec		Successful Horse Breeding (Chenier)
24-	CatskillHorse.org	Study Looks at Welfare of Lesson Horses
Dec		10.10
25-	European Trainer Magazine	What if my mare did not get pregnant? Why
Jan	O - u - di - u - l l	embryos fail (Chenier)
25-	Canadian Horse Annual	Using arterial stiffness measurement to
Jan	A	understand laminitis (Dr. Arroyo)
25-	AmericanHorsePubs.org	Make 2025 the Year of Optimal Equine Nutrition:
Jan		Join the Body Condition Scoring Course

25-	European Trainer Magazine	What if my Mare did not get Pregnant? Dr.
Jan		Chenier on Early Pregnancy Loss
25-	HorseJournals.com Hoofbeats	Ring in the New Year with a Free Horse
Jan		Behaviour & Safety Course for Youth
25-	CosaOnline.com	Free Respiratory Course Last Call
Jan		
25-	Guelph Mercury	Ring in the New Year with a Free Horse
Jan		Behaviour & Safety Course for Youth
25-	StandardbredCanada.ca	Free Horse Behaviour & Safety Course from
Jan		Equine Guelph
25-	EquiMed.com	Creating a Farm Specific Biosecurity Plan - Why
Jan		Every Barn Needs One
25-	EquiMed.com	Horse Behaviour and Safety Q & A
Jan		
25-	HorseJournals.com Hoofbeats	Top Article of Year - Test your hay knowledge
Jan		
25-	Horse-Canada.com	Free Horse Behaviour and Safety Course for
Jan		Youth
25-	HorseJournals.com Hoofbeats	Importance of Air Quality in the Stables
Jan		
25-	HorseJournals.com Hoofbeats	Eye Care in the Performance Horse (Research
Jan		Radio Podcast)
25-	HarnessLink.com	Emily McNulty receives L'Heureux Memorial
Jan		Equine Award
25-	HarnessLink.com	Equine Guelph Offers Tips for Colic Prevention
Jan		Month
25-	Muckrack.com	Equine Guelph Offers Tips for Colic Prevention
Jan		Month
25-	Horse-Canada.com	Emily McNulty Receives Equine Memorial Award
Jan		(tuition award)
25-	AmericanHorsePubs.org	Equine Guelph' Colic Prevention Month Serves
Jan		Easy to Digest Tips
25-	StandardbredCanada.ca	Equine Guelph Announces Roger L'Heureux
Jan		Award Recipient
25-	CosaOnline.com	Horse Heritage Movie Night in Erin ñ
Feb		Somebeachsomewhere
25-	PaulickReport.com	University of Guelph to hold online course on
Feb		racehorse gut health
25-	StandardbredCanada.ca	Free Racehorse Gut Health Course From
Feb		Equine Guelph
25-	HorseJournals.com Hoofbeats	How to Cool out a Hot Horse in Winter
Feb		
25-	HarnessLink.com	Gayle Ecker Awarded King Charles III
Feb		Coronation Medal
25-	Muckrack.com	Gayle Ecker Awarded King Charles III
Feb		Coronation Medal

25- Feb	Horse-Canada.com	Gayle Ecker Awarded King Charles III  Coronation Medal
25- Feb	Horse-Canada.com	Treating Kissing Spine in a New Way
25- Feb	HorseJournals.com Hoofbeats	Early Pregnancy Loss (Dr. Betteridge - Research Radio)
25- Feb	OVC Bulletin	Course: Gut health and colic/ulcer prevention ñ February 10 to 21
25- Feb	OVC Bulletin	Equine Guelph Unveils New Website
25- Feb	North American Trainer Magazine	Can Spirulina Help Horses Recover Faster from Intense Exercise?
25- Feb	HarnessLink.com	Equine Guelph Unveils New Website
25- Feb	StandardbredCanada.ca	Equine Guelph Addresses Common Colic Myths
25- Feb	ManitobaHorseCouncil.ca	Course: Gut health and colic/ulcer prevention ñ February 10 to 21
25- Feb	ManitobaHorseCouncil.ca	Equine Guelph Horse Behaviour & Safety ñ Winter í25
25- Feb	Farms.com	Equine Guelph Leader Wins Top Honour (Gayle Ecker King Charles III Coronation Medal)
25- Feb	CCSAW.uoguelph.ca	Gayle Ecker Awarded King Charles III  Coronation Medal
25- Feb	PaulickReport.com	Biosecurity Risk Calculator New Tool Available from Equine Guelph, EDCC
25- Feb	AmericanHorsePubs.org	Equine Guelph and the Equine Disease Communication Center Announce the New Biosecurity Risk Calculator 2.0
25- Feb	EquineDiseaseCC.org	Equine Guelph and the Equine Disease Communication Center Announce the New Biosecurity Risk Calculator 2.1
25- Feb	TheRider.com	A Strong Gathering of Horse Enthusiasts Attend the Grey Bruce Farmers Week Horse Day 2025
25- Feb	TheRider.com	Make 2025 the Year of Optimal Equine Nutrition: Join the Body Condition Scoring Course
25- Feb	TheRider.com	Emily McNulty Awarded Roger L'Heureux Memorial Equine Award (Tuition award)
25- Feb	TheRider.com	Bill Galvin Racing Alliance Thanks Sponsors and Donors
25- Feb	TheRider.com	Equine Guelph' Colic Prevention Month Serves Easy to Digest Tips
25- Feb	TheRider.com	Gayle Ecker Awarded King Charles III  Coronation Medal
25- Feb	OVC Bulletin	Gayle Ecker Awarded King Charles III  Coronation Medal

25- Feb	StandardbredCanada.ca	King Charles III Coronation Medal Awarded to Ecker
25- Feb	HorseSport.com	How Can OEEEP Help Your Horse Business
25- Feb	AmericanHorsePubs.org	Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day
25- Feb	AmericanHorsePubs.org	Can Spirulina Help Horses Recover Faster from Intense Exercise?
25- Feb	EquiMed.com	Can Spirulina Help Horses Recover Faster from Intense Exercise?
25- Feb	Newsbreak.com	Can Spirulina Help Horses Recover Faster from Intense Exercise?
25- Feb	HorseSport.com	Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day
25- Feb	StandardbredCanada.ca	Free Sickness Prevention Course From Equine Guelph
25- Feb	WellingtonAdvertiser.com	Equine Guelph to offer free registration to two courses for limited time (World Horse Day)
25- Feb	HarnessLink.com	Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day
25- Feb	Muckrack.com	Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day
25- Feb	EquiMed.com	Equine Guelph Offers Sickness Prevention in Horses Course on World Horse Day
25- Feb	SmallFarmCanada.ca	Protecting Horses with a Free Biosecurity Tool
25- Feb	SmallFarmCanada.ca	Horse Behaviour and Safety course
25- Feb	SmallFarmCanada.ca	Horse Gut Health and Colic Prevention Course
25- Mar	BGRacingAlliance.ca	BGRA Youth Contests Return in 2025 with Tom Rankin's Support! (Equine Guelph youth course)
25- Mar	ManitobaHorseCouncil.ca	Equine Guelph Introduction to Forage
25- Mar	AmericanHorsePubs.org	More than Four on the Floor - Trailer safety
25- Mar	EquineChronicle.com	More than Four on the Floor - Trailer safety
25- Mar	AmericanHorsePubs.org	March Kicks off Vaccination Season
25- Mar	AmericanHorsePubs.org	New Online Course for Youth Interested in Careers in the Horse Industry
25- Mar	PaulickReport.com	New Online Course for Youth Interested in Careers in the Horse Industry

25- Mar	Bloodhorse.com	Course Offered for Youth Interested in Equine Careers
25-	EquusMagazine.com	New Online Youth Course Explores Horse
Mar	Equusiviagazine.com	Industry Careers
25-	EquineChronicle.com	Equine Guelph & Equine Disease
Mar		Communication Center Announce New
		Biosecurity Risk Calculator 2.0
25-	VirginiaHorseRacing.com	New Online Course for Youth Interested In
Mar		Horse Industry Careers
25-	EquineDiseaseCC.org	Equine Guelph & Equine Disease
Mar		Communication Center Announce New
		Biosecurity Risk Calculator 2.0
25-	MySeniorHorse.com	EDCC and Equine Guelph Release Biosecurity
Mar		Risk Calculator 2.0
25-	TheRider.com	March Kicks off Vaccination Season
Mar		
25-	PaulickReport.com	Biosecurity Risk Calculator: New Tool Available
Mar		from Equine Guelph, EDCC
25-	EquiMed.com	Equine Guelph & Equine Disease
Mar		Communication Center Announce New
		Biosecurity Risk Calculator 2.0
25-	WellingtonAdvertiser.com	Equine Guelph relaunches biosecurity risk
Mar		calculator in partnership with Equine Disease
		Communication Center
25-	SmallFarmCanada.ca	Horse Trailer Safety Course
Mar		,
25-	SmallFarmCanada.ca	Sickness Prevention Course
Mar		
25-	SmallFarmCanada.ca	Equine First Aid Course
Mar		'
25-	SmallFarmCanada.ca	Introduction to Forage Course
Mar		S
25-	Horse-Canada.com	Free Online Horse Career Course for Youth
Mar		
25-	HorseSport.com E-news	Free Online Horse Career Course for Youth
Mar	'	
25-	TheRider.com	Equine Guelph Launches Biosecurity Risk
Mar		Calculator 2.0 with New Partner, Equine Disease
		Communication Center (EDCC)
25-	PaulickReport.com	Perform These Checks On Your Horse Trailer's
Mar	,	Floor To Avoid Disaster
25-	EquiMed.com	March Kicks off Vaccination Season
Mar	1	
25-	HorseCanada.com	March Kicks off Vaccination Season
Mar		=
25-	Canadian Horse Journal Magazine	What if my mare does not get pregnant?
Mar		(Chenier)
	i	\- /

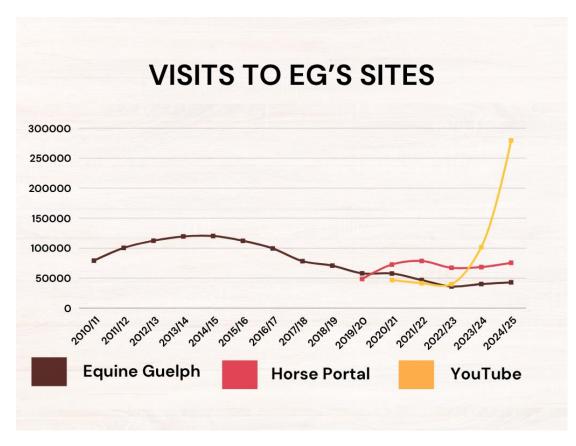
25-	TheRider.com	Horse Heritage Movie Night in Erin
Mar		
25-	TheRider.com	Equine Guelph Launches Biosecurity Risk
Mar		Calculator 2.0 with New Partner, Equine Disease
		Communication Center (EDCC)
25-	TheRider.com	March Kicks off Vaccination Season
Mar	Therader.com	Water Mons on Vaccination Cousen
25-	TheRider.com	More than Four on the Floor - Trailer safety
Mar	Therader.com	Wore than I out on the I loof - I faller salety
25-	TheRider.com	New Online Course for Youth Interested in
Mar	Therader.com	Careers in the Horse Industry
25-	TheRider.com	Don Kapper Tribute
Mar	THERIQEL.COM	Don Kapper Tribute
	The Didor com	Farm a Diploma from a loading Facina University
25-	TheRider.com	Earn a Diploma from a leading Equine University
Mar		(12-week course ad)
25-	Quarter Horse Racing Owners	Equine Guelph Spring Portal Courses
Mar	Ontario	
25-	EquiMed.com	More than 'Four on the Floor' with Equine
Mar		Guelph Horse Trailer Safety Course
25-	CatskillHorse.org	New Online Course for Youth Interested in
Mar		Careers in the Horse Industry
25-	OHHA.ca	Victoria Rollins, Making the Connection (OEEEP
Mar		grad)
25-	Horse-Canada.com	Managing Mud - Solutions to Swampy Paddocks
Apr		<ul> <li>mention &amp; link to EG fact sheet</li> </ul>
25-	Horse-Canada.com	Mare & Foal Care Tool
Apr		
25-	North American Trainer Magazine	Biosecurity Beyond the Backstretch
Apr		, ,
25-	Cannon Newsletter U of G	Discover equine careers with our free online
Apr		course for youth aged 13-17
25-	Horse-Canada.com	What do we know about Colitis in Horses?
Apr		
25-	HorseJournals.com Hoofbeats	Equine Studies (EG courses mentioned)
Apr		
25-	AmericanHorsePubs.org	What do we know about Colitis in Horses?
Apr	, anoneam lorder abd.org	Triat do no milon about conto in Fioreos:
25-	EquiMed.com	What do we know about Colitis in Horses?
Apr	Equinied.com	Willat do we know about Collis III i loises!
25-	AmericanHorsePubs.org	Get Ready for Hay Season: Forage Course
Apr	Americani loiser ubs.org	Helps You Feed Smarter
	StandardbredCanada.ca	·
25-	StandardbredCanada.ca	Researchers Developing Protocol To Diagnose
Apr	Catalvill Issues and	Equine Colitis
25-	CatskillHorse.org	What do we know about Colitis in Horses?
Apr		

25-	NewsBreak.com	Get Ready for Hay Season: Forage Course
Apr		Helps You Feed Smarter
25-	EquiMed.com	Get Ready for Hay Season: Forage Course
Apr		Helps You Feed Smarter
25-	TheRider.com	Get Ready for Hay Season: Forage Course
Apr		Helps You Feed Smarter
25-	Northwest Horse Source	Get Ready for Hay Season: Forage Course
Apr	Magazine	Helps You Feed Smarter

### Appendix 13: Web Site Report

May 1, 2024 - April 30, 2025

	Equine Guelph	TheHorsePortal.ca	YouTube
Visits/Sessions	43,000	75,487	43,900
Page Views		241,739	Video views: 279,439



Equine
Guelph
growth
chart for
various
sites
over the
years

TOP LANDING PAGES. (Behaviour – Site Content – Landing Pages)

**CONTENT** 

	Top 10 You Tube Videos May 01, 2024 – April 30, 2025
1	Spirulina as a Nutraceutical – Dr. Pearson & Dr. Golestani
2	LAMENESS LAB - CASE 1 – ASSESSMENT
3	LAER - Cast Horse Roll technique
4	LAMENESS LAB - CASE 1 – RESULTS
5	What are the signs a horse may be lame? - Dr. Nicola Cribb
6	What is Roaring? - Dr. Heather Chalmers - Roaring Research
7	LAMENESS LAB - CASE 3 - ASSESSMENT
8	The Emergency Halter - How to create a halter for a loose horse - Dr. Susan Raymond
9	VIDEO CHALLENGE Case 1 Assessment – Lameness Lab
10	LAMENESS LAB - CASE 2 – ASSESSMENT

Equine JobTrack Pages	Views	Users
EquineJobTrack.ca	34,735	10,480
Start Job Search	13,891	6,813
Browse All Jobs	6,092	2,596
Employer dashboard	617	227
Post a Job	551	124

Equine JobTrack continues to be an important website for the equine industry.

### **Appendix 14: Sponsors**

Equine Guelph would like to thank the following sponsors for their contributions and support of Equine Guelph's program.

























# Quarter Report - Q4, Equine Guelph, 2024-2025 FY

### **Operating Accounts:**

As at 30 Apr 2025

Revenue-Expense	Category	Туре	YTD
REVENUE			
	GENERAL REVENUE	HORSE PORTAL, LAR, OEEEP, GRANTS, ETC.	-\$284,501
		OPEN-ED - 12 WK COURSE TUITION	-\$87,663
			-\$372,164
TRANSFERS			
	TRANSFERS	FUND TRANSFER - HIP/QH/HBPA RES. SUPPORT	-\$37,936
		SPONSORSHIP, GRAS, Edu Donations, C. Kerr	-\$247,714
		OVC Central Budget Allocation	-\$70,408
			-\$356,058
EXPENSES	DED CO. 11.151	0.1.1.0150/051/15170 - 0.071.55	****
	PERSONNEL	SALARIES/BENEFITS - EG STAFF	\$612,066
	OPERATING	EDUCATIONAL SEMINAR (STAFF, HON'S)	\$57,729
	OI LIVATING	HORSE PORTAL REG - VISA/MC FEES	\$1,508
		LEASE AND RENTAL PMTS - PRINTER	\$767
		OFFICE SUPPLIES	\$804
		SUPPLIES- DATA PROCESSING/COMPUTERS	\$55,822
		PRINTING AND PUBLICATION CHARGES	\$3,597
		Uofg PHONE SERVICES, PARKING, MAILING	\$1,841
		TRAVEL/RELOCATION/HOSPITALITY	\$15,769
		MISCELLANEOUS SUPPLIES	\$ <b>791</b>
		MISCELLANEOUS EXPENSES	\$10,140
Sub-Total			\$148,768
		TOTAL EQUINE GUELPH 2024-2025	\$32,613
		2023-2024 BUDGET CARRYFORWARD	\$34,608
		TOTAL EQUINE GUELPH CARRYFORWARD	\$1,995

# **EQUINE GUELPH - Funds Held in Alumni House / OVC Endowment Accounts**

As at: 30 April 2025

Donation/Sponsorship Accounts	Acct #	Total	Notes
Education	802091	\$34,891	
Sponsorship	802811	\$186,525	
Area of Greatest Need	802089	\$120,230	
For The Herd	803694	\$1,355	
JobTrack, LAR (GRAS)	803914	\$50	1st installment transferred to Operating
OE Welfare Fund	802764	\$4,290	
Total		\$347,341	
<b>Endowment Accounts</b>			
Kerr Fund for Eq. Education	710859	\$113,800	
Estate of Donna Moore	710934	\$434,053	Available Experiaable
Research Donations			
	802092	\$8,310	
Scholarship Accounts			
Roger L'Heureux	803258	\$6,330	Awarded to tuition award winner in Winter 2024 (\$1100)
Stuart Stocks	803240	\$555	To be allocated to tuition award winner - Winter 2024

	As at: 30 April 2025				
	EP TAYLOR	HIP/QH	НВРА	Donations/Other	
Account Number:	710655	045878	046071	022298	Totals:
ND BALANCE, Previous Year End	\$31,393	\$1,945	\$90	\$0	\$33,428
REVENUE					
EP Taylor Endowment	\$103,231	-	-	-	\$103,23
HIP/QR Allocation	-	\$125,000	-	-	\$125,000
HBPA Allocation	-	-	\$65,000	-	\$65,000
Donna Moore Endowment				\$68,265	\$68,265
Donations	=	<del>-</del>	=	\$2,564	\$2,564
TOTAL REVENUE	\$103,231	\$125,000	\$65,000	\$70,829	\$364,060
INTERNAL TRANSFERS HIP/QH Admin Support (20%)	-	-\$25,000	_	-	-\$25,000
HBPA Admin Support (20%)	-	-	-\$13,000	-	-\$13,000
Other		\$0	\$0		\$0
TOTAL TRANSFERS	\$0	-\$25,000	-\$13,000	\$0	-\$38,000
PROGRAM EXPENDITURES					
Research Project Allocations	-\$62,383 A	-\$60,785	-\$34,043	-\$70,829	-\$228,04
Peer Review Honorariums	-\$1,754				-\$1,754
i cei neview i lonorarianis	\$0				\$0
Other Expenses (Travel, etc.)	\$U			1 1	

A - Includes 13k returned from cancelled Arroyo project.